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CHUCKE CHEESE'S[®]

POS Training Seminar

January 2008

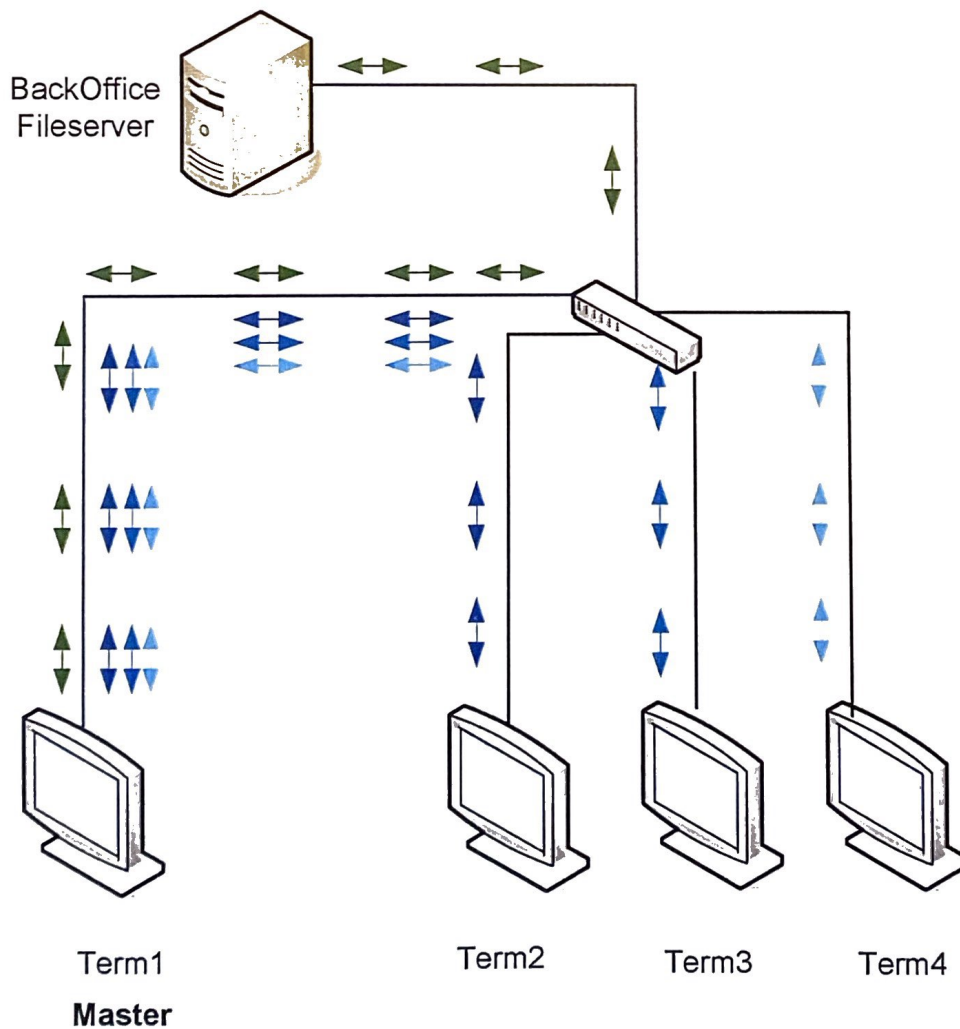


How the POS System Communicates.

The diagram below shows the flow of communications between all the POS Terminals and the backoffice fileserver.

Only the MASTER terminal communicates with the backoffice fileserver. All other terminals communicate with the MASTER terminal only.

The MASTER terminal keeps all information (Everything from orders to the time) synchronized across the whole POS system, as well as taking orders.

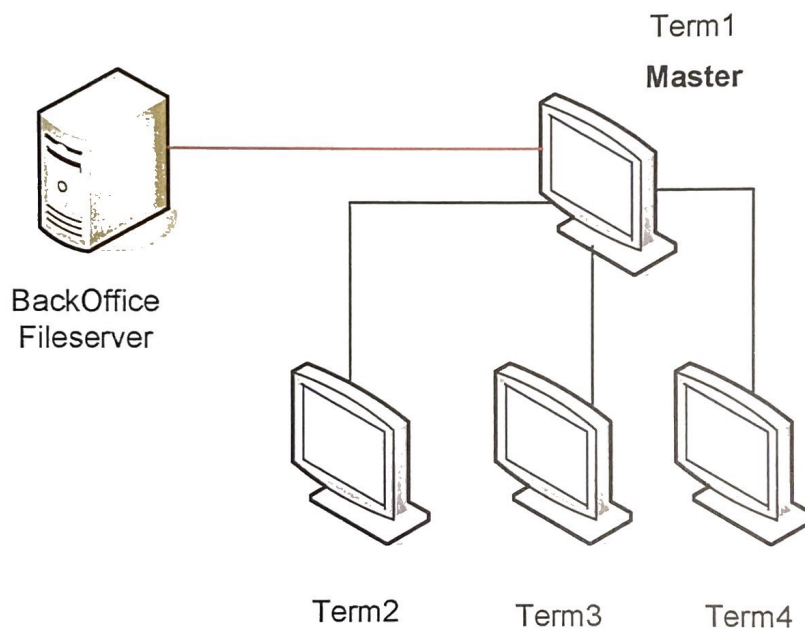


The Master terminal

Only terminal designated as MASTER communicates with the BackOffice fileserver.

All other terminals communicate to the MASTER terminal only.

Normally, the lowest numbered terminal (#1) will typically default to being the master. Any other terminal can become the master as necessary.



The master terminal keeps all the other terminals synchronized with order numbers and transactions. Even the time is synchronized to the terminals via the master.

There is another, "hidden" register. It is the kitchen printer (Named alohabohsvr) that is running on the backoffice fileserver. The Master terminal controls this virtual terminal as well.

If the connection between the backoffice computer and the maser terminal is lost, the Master terminal will wait 60 seconds and try to discover the BOH computer. If BOH computer is still unavailable after 60 seconds, the Master terminal ONLY will be asked to be made a fileserver.

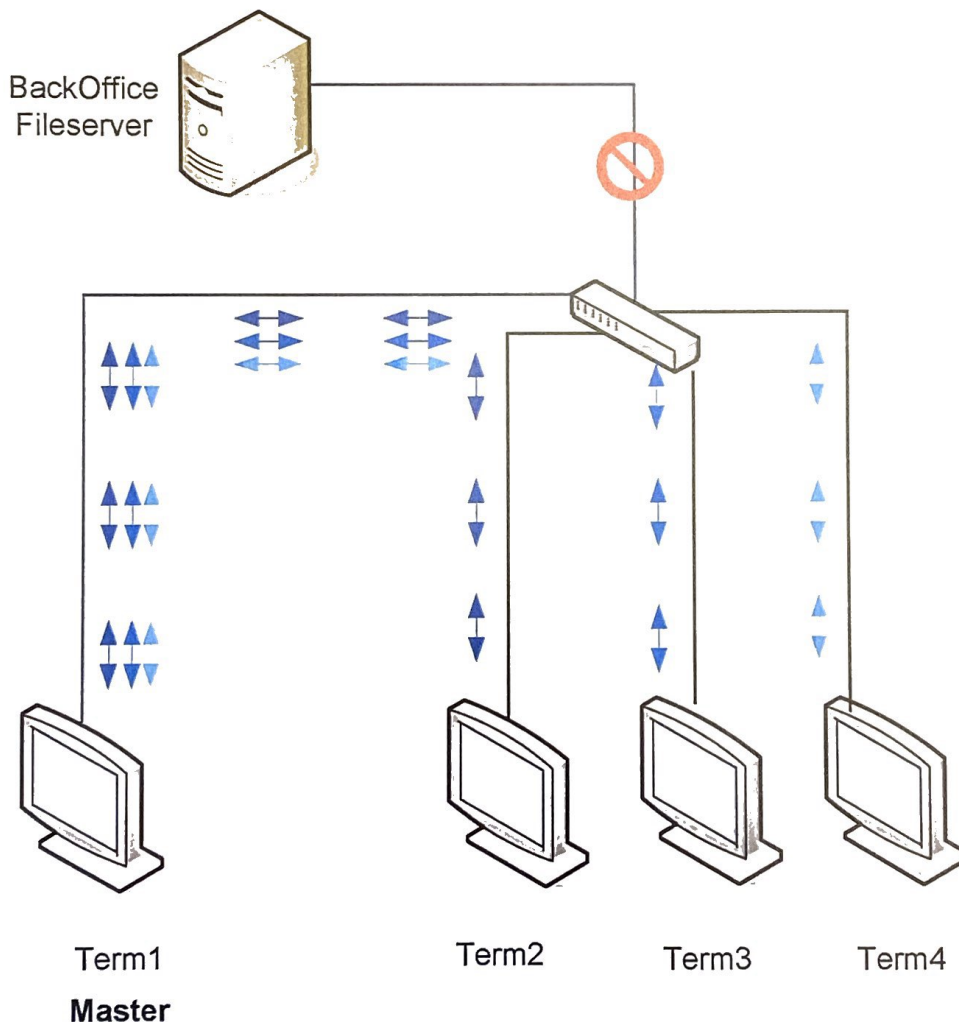
If none of the terminals can see a master terminal, they will each ask to be made a fileserver after 60 seconds. Check the network switch to make sure it is not locked up.
-Usually will be.

How the POS System Communicates with the terminals

If the connection between the backoffice fileserver and the Master terminal is unavailable (Connection, or PC down), All POS Terminals will say, "Unable to locate fileserver"

The Master terminal will wait 60 seconds to see if the fileserver will reappear. If not, the Master terminal (Only) will ask to be made a fileserver. Once this prompt is answered, the other terminals will start functioning again as well as the Master terminal who is now acting also as the fileserver.

No debit card transactions can be accepted at this time. Credit cards will be accepted offline only.

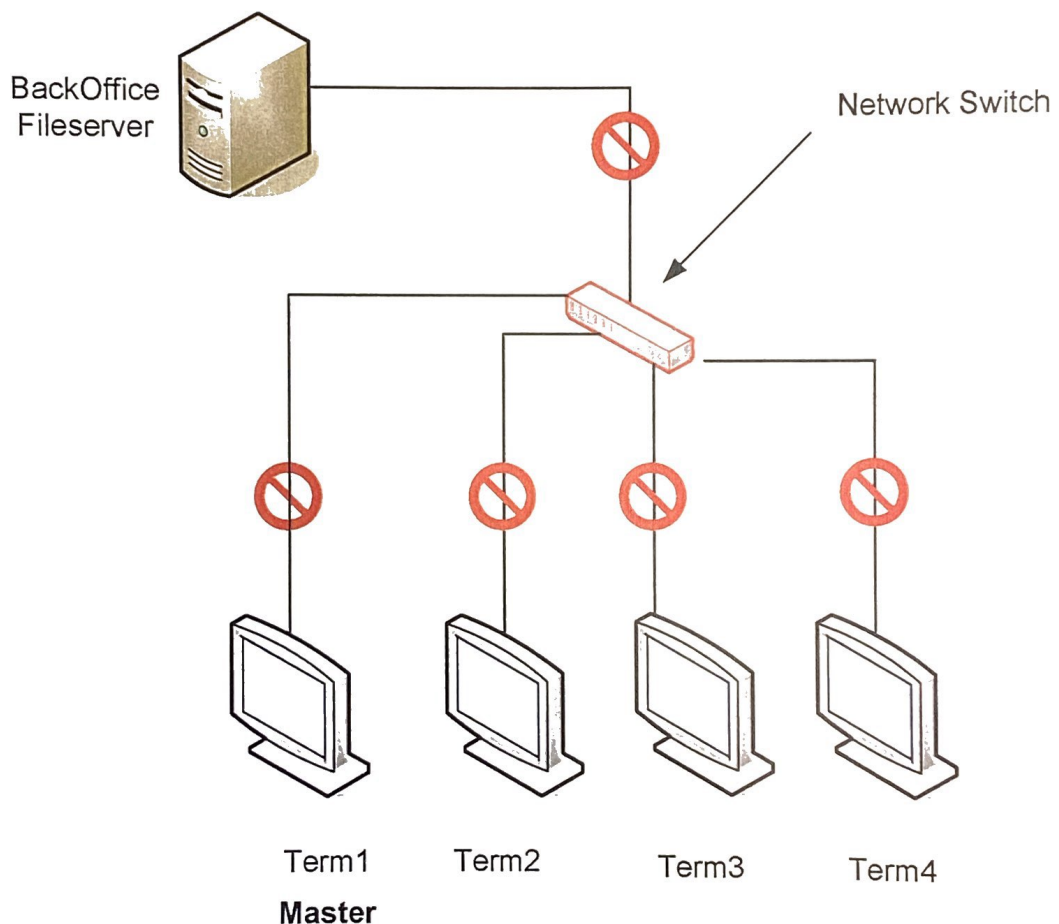


Once the problem has been resolved in this type of situation, the Fileserver Recovery option will bring everything back to normal quickly. No resetting of the network switch or manually rebooting terminals is required.

How the POS System Communicates with the terminals

If the network switch (Also called a hub) is locked up or fails, ALL POS terminals will report, "Unable to locate Master Terminal" This is a good sign the network switch is locked up. Power off the network switch, and power it back up. The terminals should recover on their own in a few seconds.

The last thing you want to do is restart your registers. Most standalone cases can be resolved without the need to reboot. The error messages on the terminals will help you identify the problem.



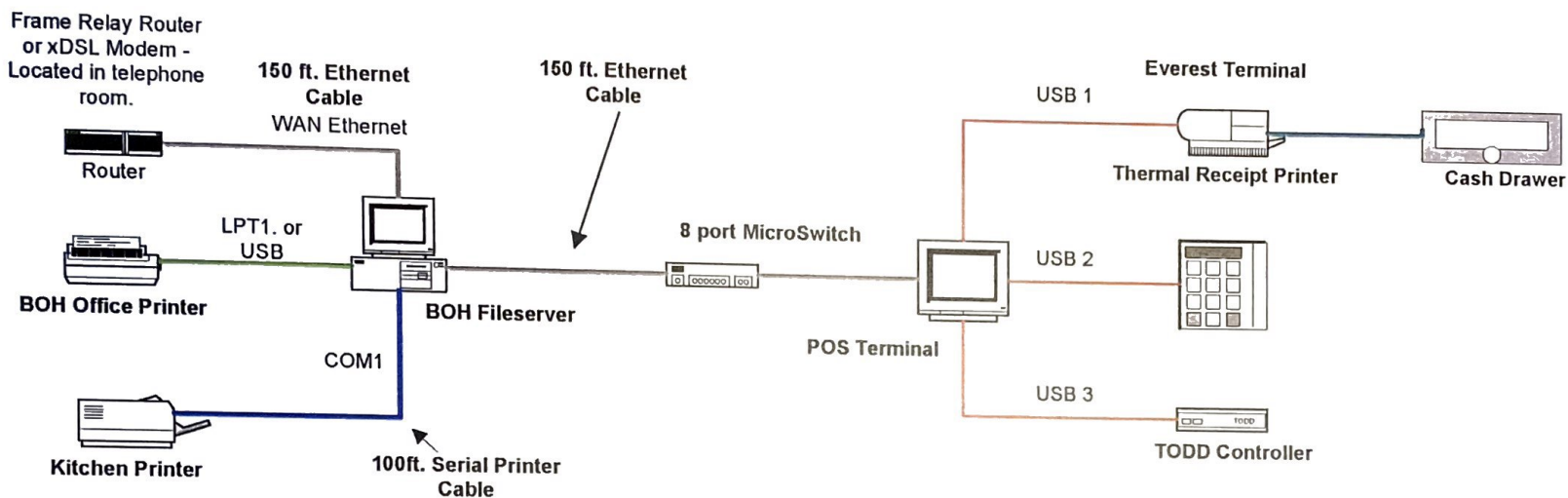
We get a lot of calls where resetting the network switch never happens and now even though all the terminals were rebooted, none of them will allow the cashier to start taking orders. After about 15 minutes, after all the terminals were rebooted and they all time out, can they be made a fileserver and orders are starting to be taken in standalone.

Resetting the hub FIRST before doing anything else will most likely resolve this situation.

Having the entire management staff know where the network switch is and how to reset the device during standalone situations is critical to resolving these types of problems

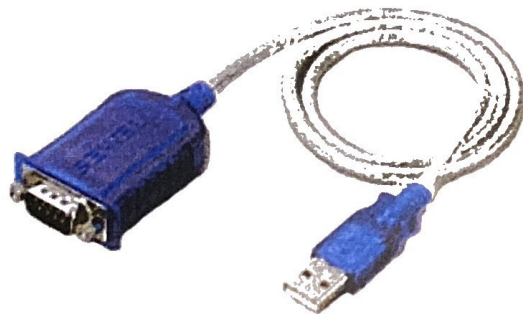
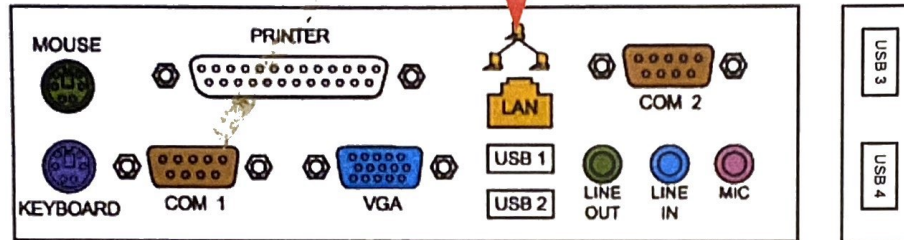
Typical CEC Aloha POS System Connections Diagram

POS Terminal Type: Javelin Viper or Wedge II.

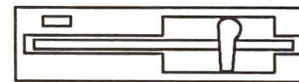


Javelin Wedge II Connections -Windows XPe installation only.

Connect Ethernet to the POS LAN.



Sewell USB-to-Serial Adapter
[Http://www.sewelldirect.com](http://www.sewelldirect.com)
 Part: SW-1301



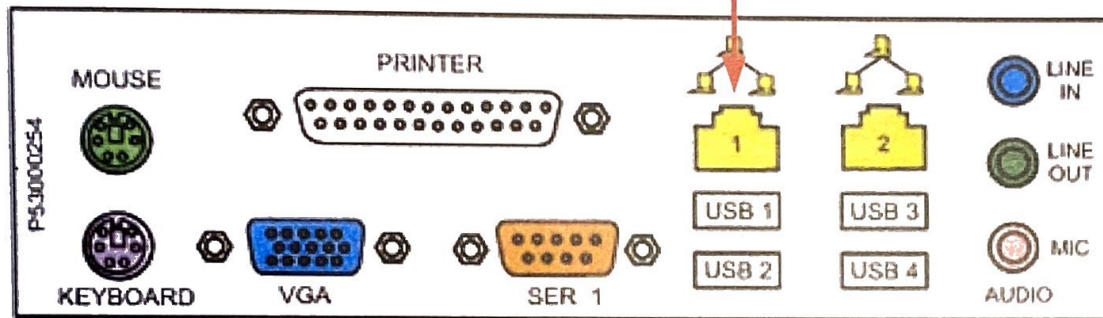
USB Floppy drive
 * -Only connected during software re-installation only

The following devices are connected to the following USB ports using the Sewell USB-to-Serial adapters,

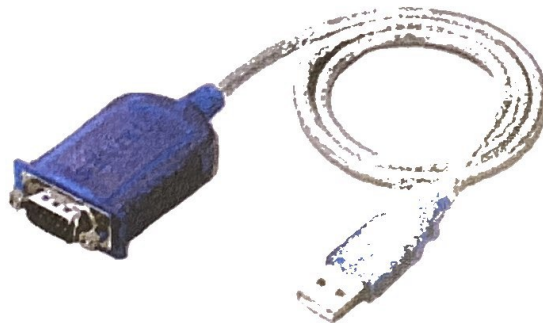
- | | | |
|-------|-----------------|---|
| USB 1 | Receipt Printer | Floppy Drive -For software re-installation only |
| USB 2 | Debit Terminal | |
| USB 3 | TODD System | |

Javelin Viper Connections -Windows XPe installation only.

Connect Ethernet 1 to the POS LAN.



USB Floppy drive
* -Only connected during software re-installation only



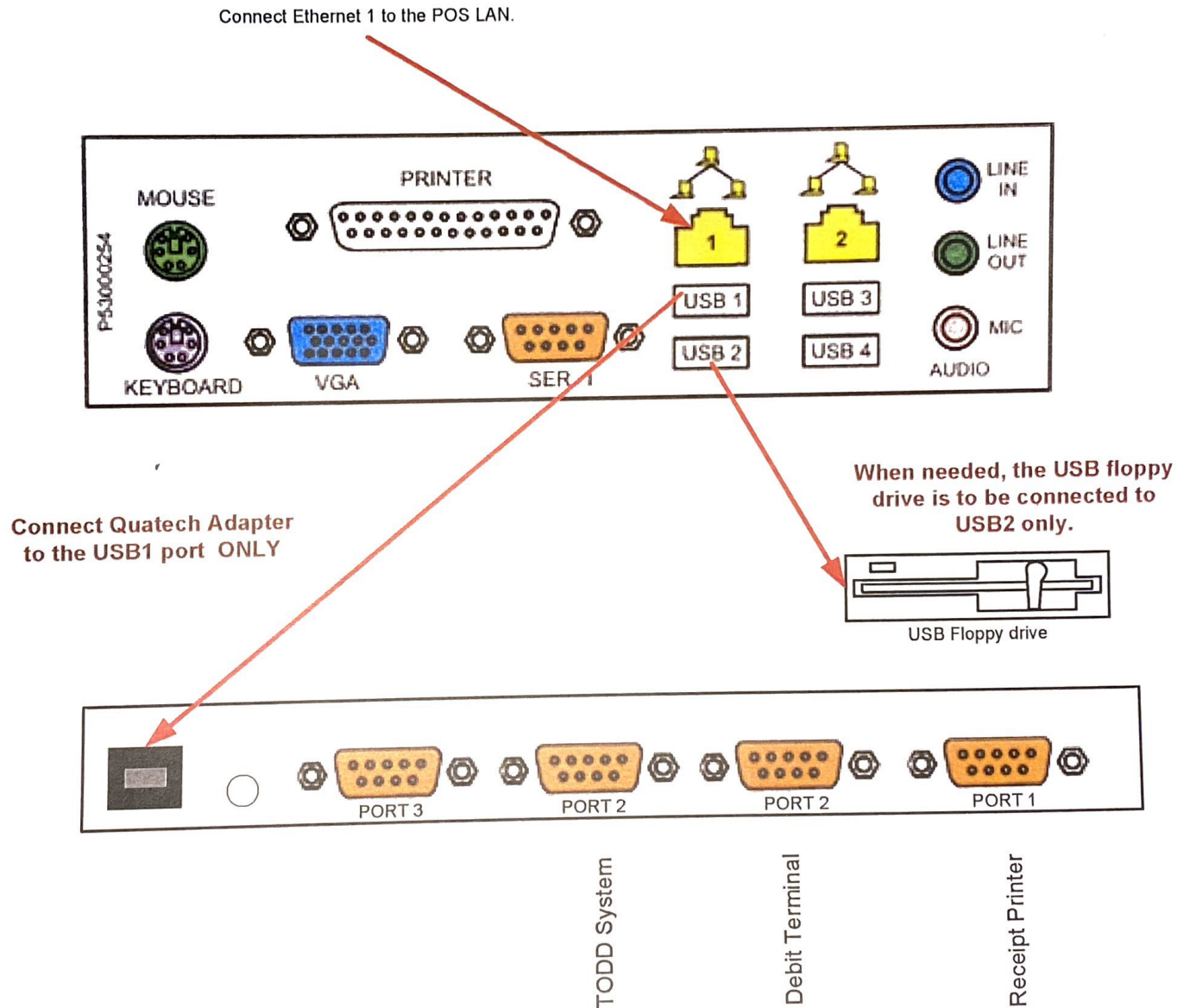
The following devices are connected to the following USB ports using the Sewell USB-to-Serial adapters,

- USB 1** Receipt Printer Floppy Drive -For software re-installation only
- USB 2** Debit Terminal
- USB 3** TODD System

Sewell USB-to-Serial Adapter
[Http://www.sewelldirect.com](http://www.sewelldirect.com)
Part: SW-1301

Javelin Viper Connections -Windows XPe installation only.

NOTE: Quatech Multi-USB Serial port boxes are no longer used. The Sewell USB-to-Serial Adapters are now used.



Network Connections

- Drawing shows Aloha Connection.
- Progressive System is same connection without the Frame Relay addition.
- Systems with WAN will have second network card installed on BOH fileserver.

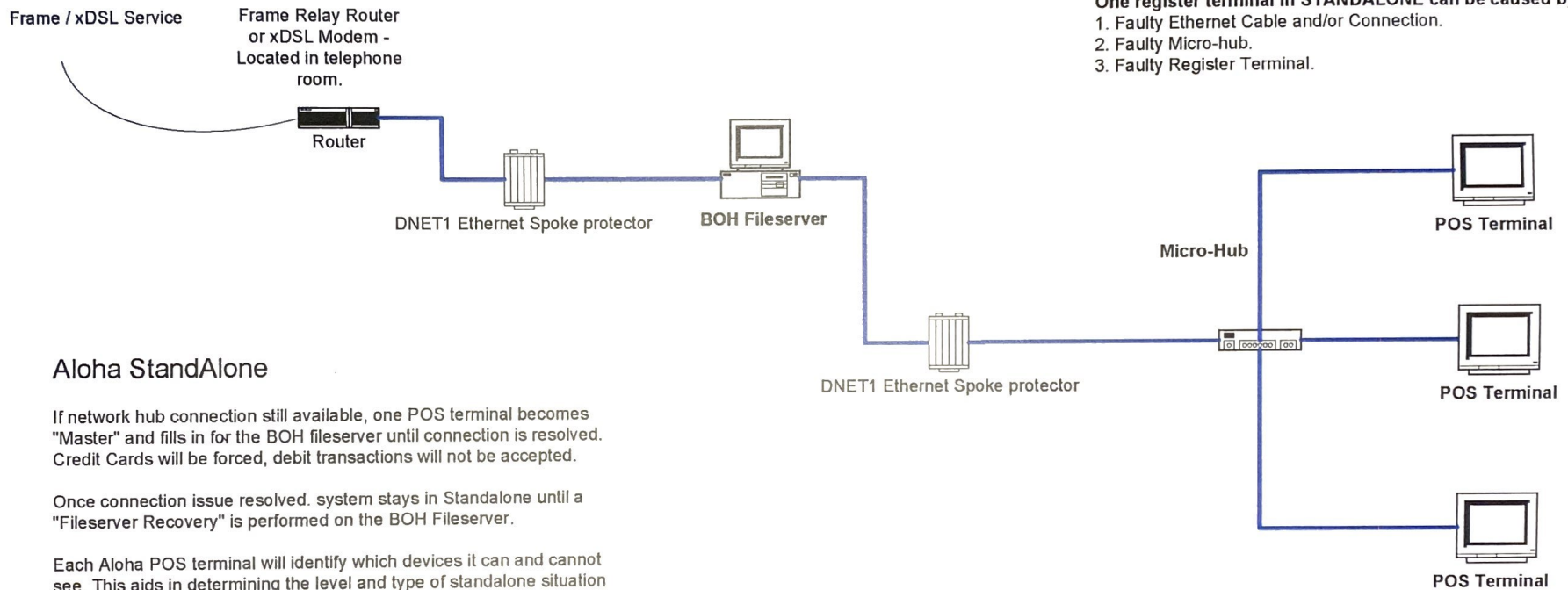
Problems with the network connections causes "STANDALONE"

Entire system in STANDALONE can be caused by:

1. Faulty Network Cable and/or Connections.
2. Faulty Micro-hub.
3. Faulty PC

One register terminal in STANDALONE can be caused by:

1. Faulty Ethernet Cable and/or Connection.
2. Faulty Micro-hub.
3. Faulty Register Terminal.



Aloha StandAlone

If network hub connection still available, one POS terminal becomes "Master" and fills in for the BOH fileserver until connection is resolved. Credit Cards will be forced, debit transactions will not be accepted.

Once connection issue resolved, system stays in Standalone until a "Fileserver Recovery" is performed on the BOH Fileserver.

Each Aloha POS terminal will identify which devices it can and cannot see. This aids in determining the level and type of standalone situation you are experiencing.

Aloha Wide Area Network Connection

Very similar to a typical connection to the public internet, but this connection is totally private and used only by CEC.

WAN connection loss will keep credit cards from processing online. If connection is down, credit cards will be processed offline until connection is resumed -Forced credit cards. Debit cards cannot be accepted offline.

Receipt Printer Connections

Cash Drawer not working.

1. If Receipt is not working, Cash drawer may not be at fault.
2. Faulty Cash Drawer.
3. Bad connection to the Thermal Receipt Printer
4. Faulty Receipt printer.

Receipt printer not working.

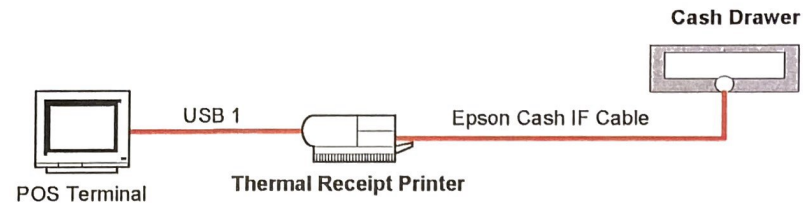
1. Check paper.
2. Reset Parallel converter.
3. Check cable connections.
4. Printer at faulty.
5. Register Terminal at fault.

Serial or Parallel Printers?

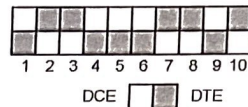
Currently all systems are being built using serial printers. With the introduction of the Aloha POS and POS terminals using Windows Xpe, the parallel port printers were no longer usable.

Parallel port printers and the use of Parallel-to-Serial adapters were introduced several years ago with the TODD System. During this time, the POS Software was DOS based, and the current POS terminals only had two serial ports which were already used for Debit Terminals and the token dispenser (TODD), so the receipt printer was made to utilize the unused parallel port.

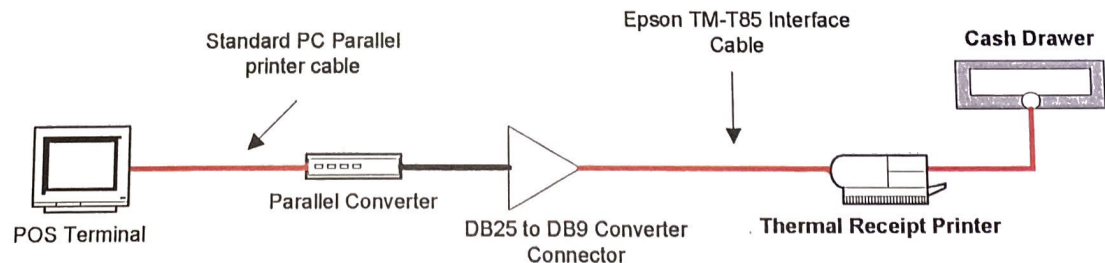
There are still many receipt printers in use connected to the parallel port of POS Terminals running Aloha. These POS terminals are running Windows 95/98 which the parallel port is still usable. Any terminals running any version of Windows higher than 98, must utilize serial port (Or USB-to-Serial ports) for the printers to operate. The Aloha application because of the way it is designed cannot take advantage of parallel port receipt printers.



Parallel-to-Serial Converter Settings



*** No longer used * - Parallel port adapter used on Epson TM-T85 series printer.**



Kitchen Printer Connections

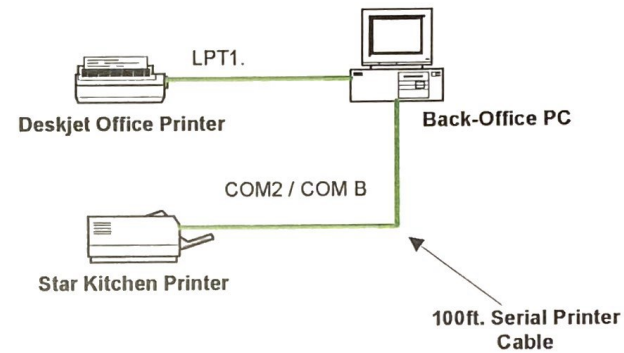
Kitchen or printer failure will eventually cause 'STANDALONE'.

Kitchen Printer failure can be caused by:

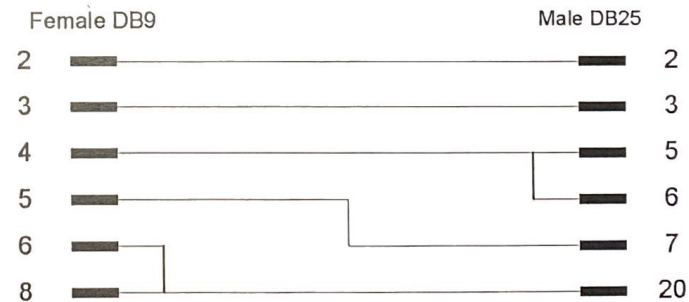
1. Out of paper.
2. Paper jam.
3. Corroded serial cable connector.
4. Printer sitting directly on stainless steel make-table.
5. Bad printer.
6. Serial cable damaged.
7. Deskjet printer not functioning.

Deskjet printer failure can be caused by:

1. Out of paper.
2. Ink cartridges empty or faulty.
3. Star kitchen printer not working.
4. Printer at fault.



100ft Serial cable pin-out.



If the serial printer cable needs to be repaired, any technician can purchase new connectors from Radio Shack or an electronics shop and easily repair the cable.

TODD System Connections

Designer's notes:

1. Serial cable between TODD Controller and POS Terminal is unique. It is not a standard cable, and it does matter which end connects to the TODD Controller (Grey connector) and which end connects to the POS Terminal (Silver connector).

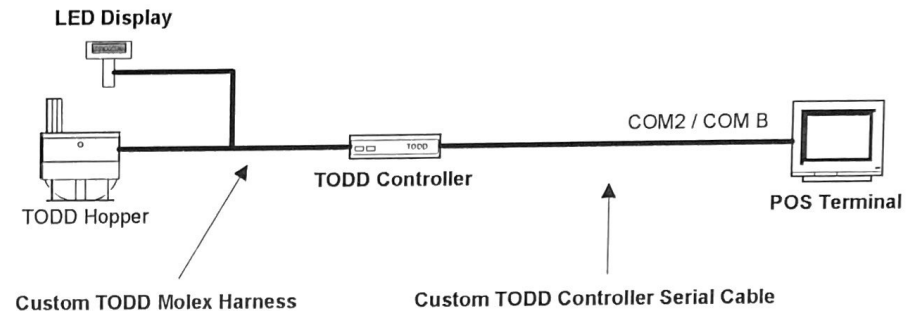
2. Jackpotting (Massive amounts of tokens dispensing) can be caused by bad AC from the outlets. Use a power conditioner to clean up the AC.

3. Each TODD System comes with an Isobar power strip. There are four outlets on the Isobar. The only devices to be connected to each Isobar are, the TODD Controller, the parallel converter (Not pictured), the POS Terminal, and the thermal receipt printer (Not pictured).

4. The proper way to reboot a register terminal with the TODD System installed is by using the power switch on the Isobar. This will ensure that all programmable devices are cleared.

Recommended Power Conditioner:

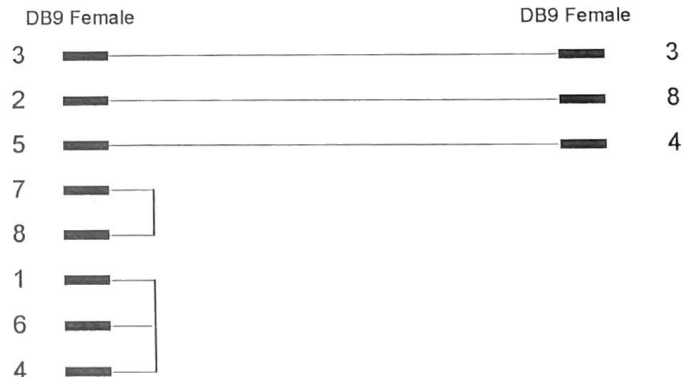
Oneac PC Series Power Conditioner.
Model: PC240A
Cost \$157.00 each (As of this writing).



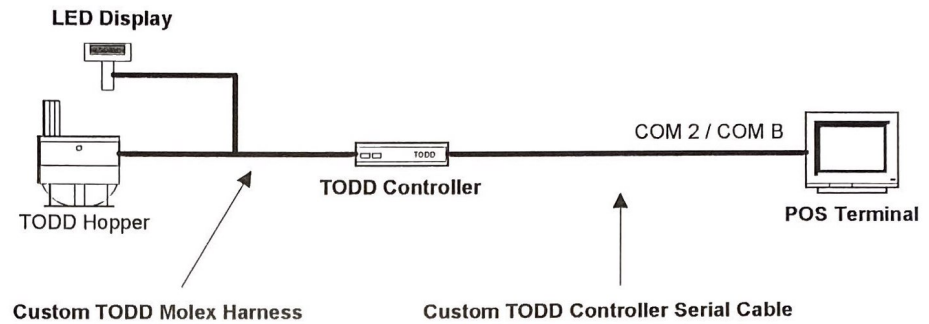
Custom TODD Controller Serial Cable

Chrome Cover -POS Terminal

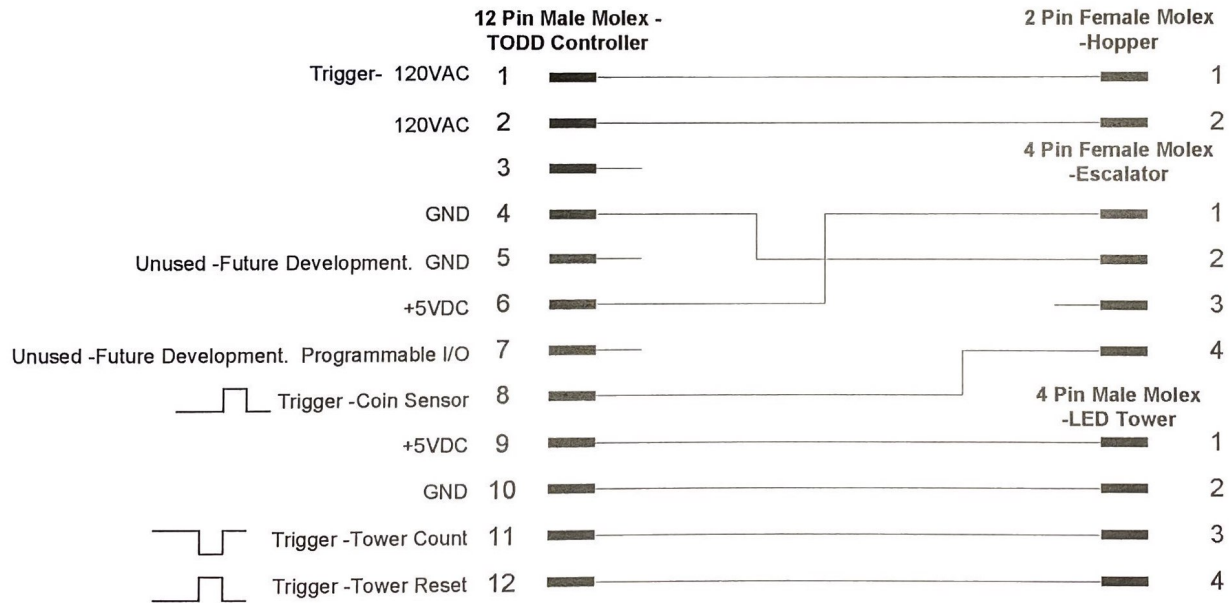
Grey Cover -TODD Controller



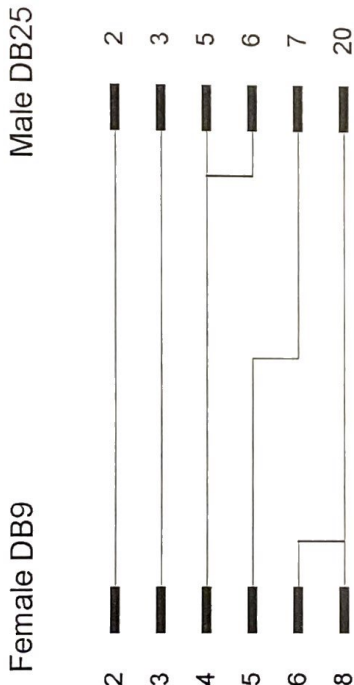
TODD System Connections



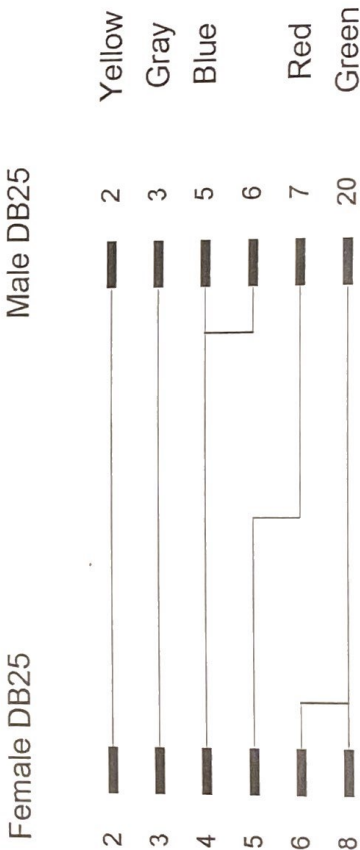
Custom TODD Molex Harness



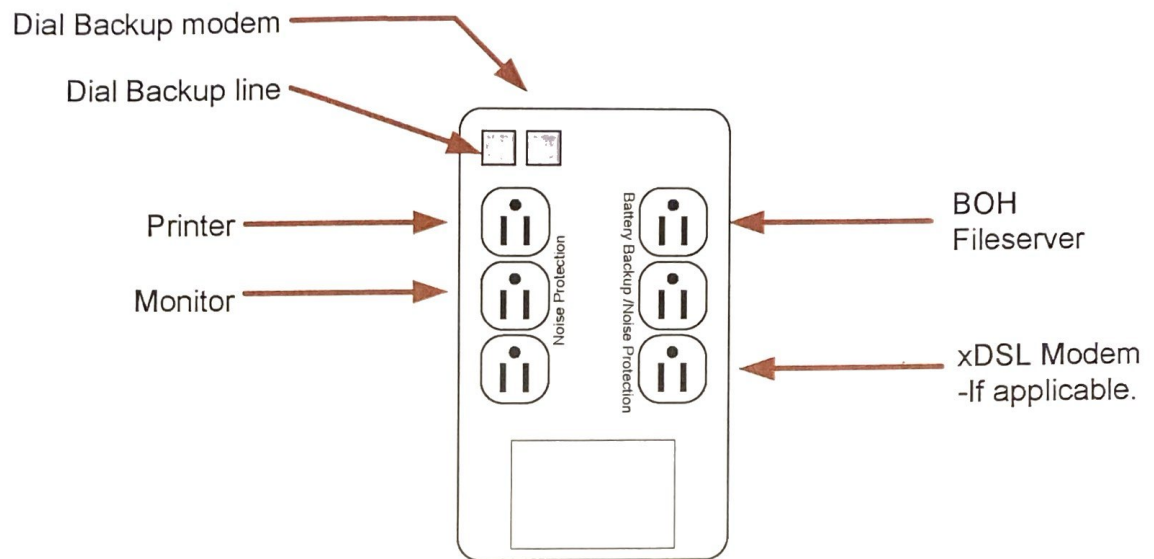
DB9 to DB25 Serial Printer Cable



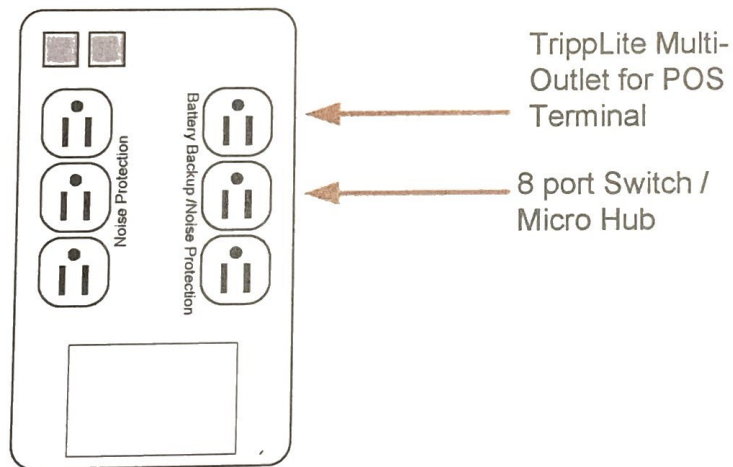
DB25 to DB25 Serial Printer Cable



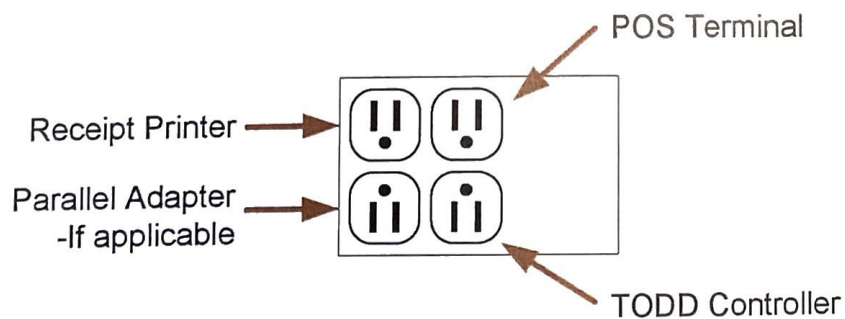
TrippLite UPS and Multi Outlet Device Connections



UPS Connections for BOH



UPS Connections for FOH



TrippLite Multi-Outlet Connections

Quick Fixes to common POS System problems



Contents

All terminals are frozen (Locked up)

Manager or Employee receives, "Invalid Employee", on register.

Manager receives, "Invalid Password", on the backoffice computer.

Credit Cards Offline / Auth hangs indefinitely

Wide Area Network is Down

All Register Terminals are all Frozen

First thing, **DO NOT** start by rebooting everything. This can extend your issue for several minutes.

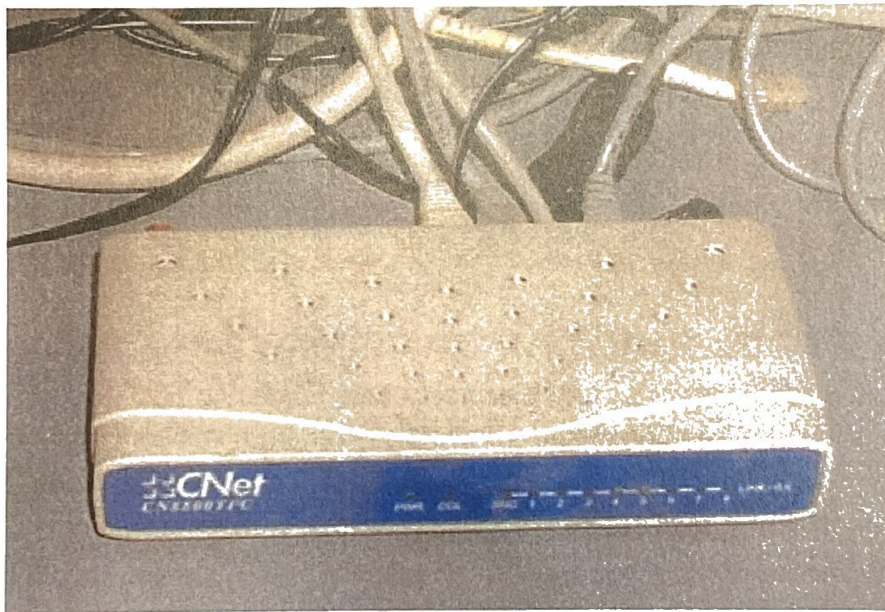
1.

If all register terminals freeze and stop responding, wait 20 seconds to see if the POS System will resolve the problem on it's own. If not, go to the next step.

2.

Find the network switch (hub). Unplug the power cord to the switch for 5 seconds and plug it back in.

The network switch is typically somewhere under the front counter.



Typical Network Switch.

3,

After you connect the power cord back to the network switch, the register terminals should start working in the next 10 seconds..

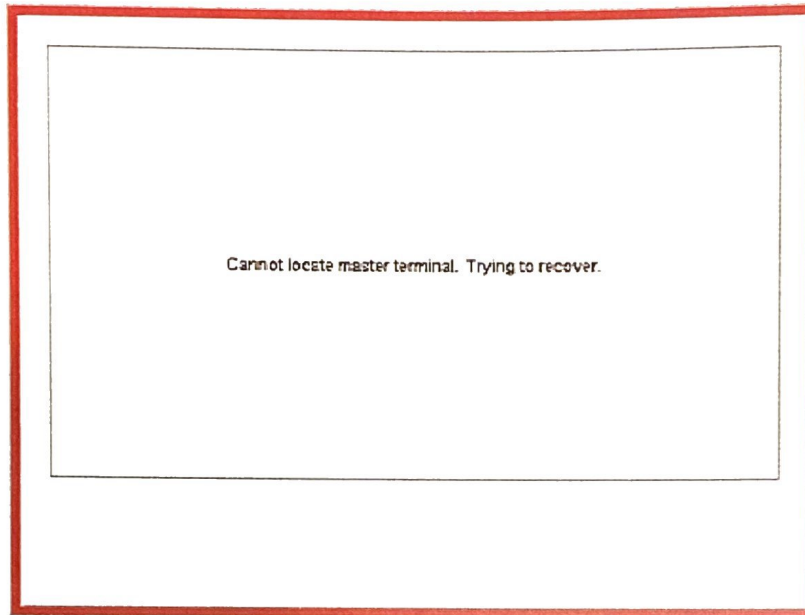
-If not, go to Step 4.

4.

Do the terminals display the message, "Cannot Locate Master"?

-If YES, reboot the register terminal that was the master (Typically terminal #1).

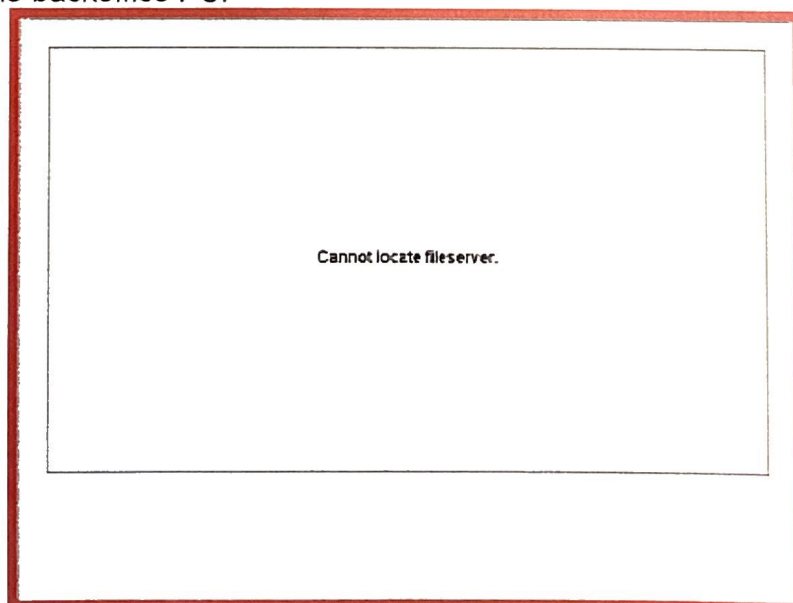
Another register may become the master automatically and possibly reboot one or more terminals. This is normal and is the Aloha system bringing itself back up.



5.

Do the terminals display the message, "Cannot Locate Fileserver"?

-If YES, reboot the backoffice PC.



6.

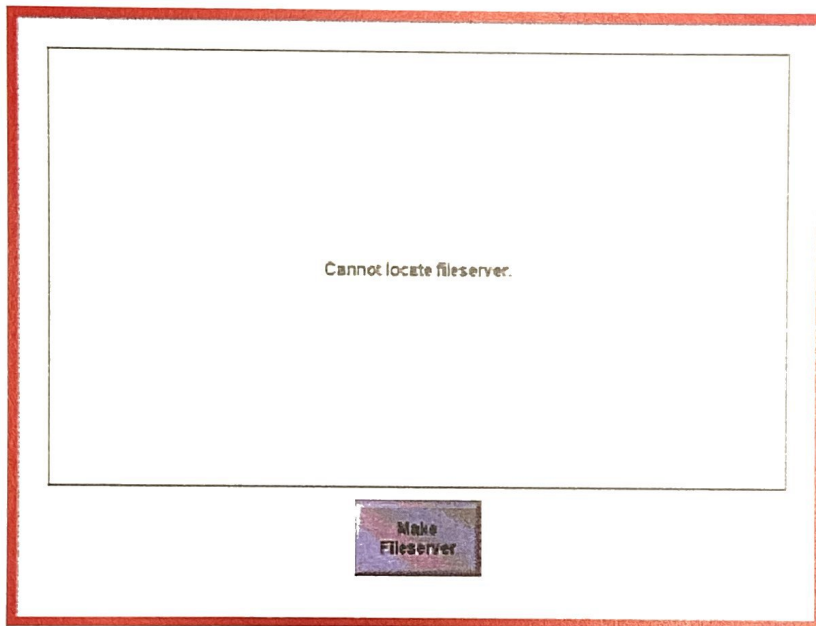
Did restarting the backoffice computer fix the problem?

-If not, go to the next step.

7.

Make the Master terminal the Master.

This will be the only register terminal displaying a button, "Make Fileserver".



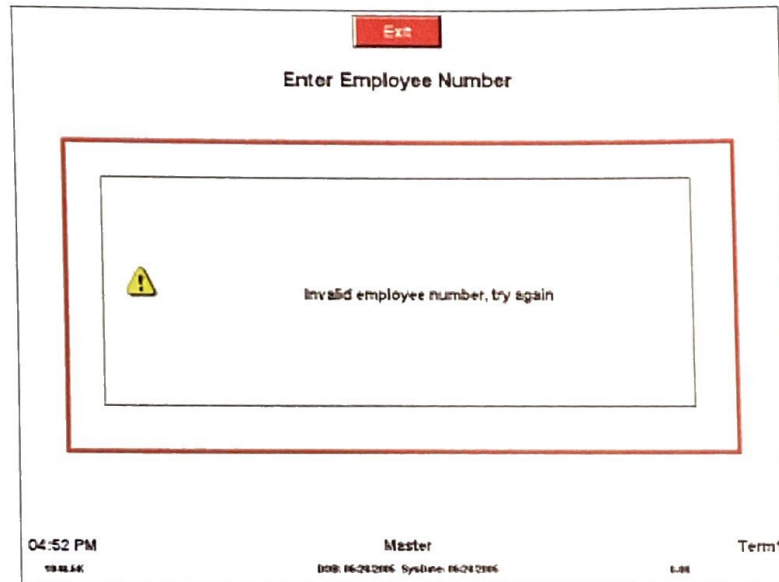
To make this terminal the file server, touch the **Make Fileserver** button, and a keypad appears along with two numbers at the bottom of the screen. Add the two numbers together, enter the sum on the keypad, and touch OK. The sum acts as a password.

For example, if the numbers 123 and 456 appear at the bottom of the screen, the password is 579.

Contact POS Support for additional assistance in getting your system out of StandAlone.

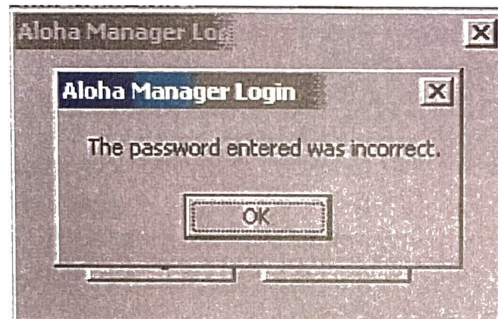
Employee or manager receives, "Invalid Employee Number " message on Register Terminal

Solution: From a register terminal, a Manager must clear the password for the employee. If a manager is receiving this message, another manager must clear the password.



Manager receives, "Invalid Password" on the backoffice computer.

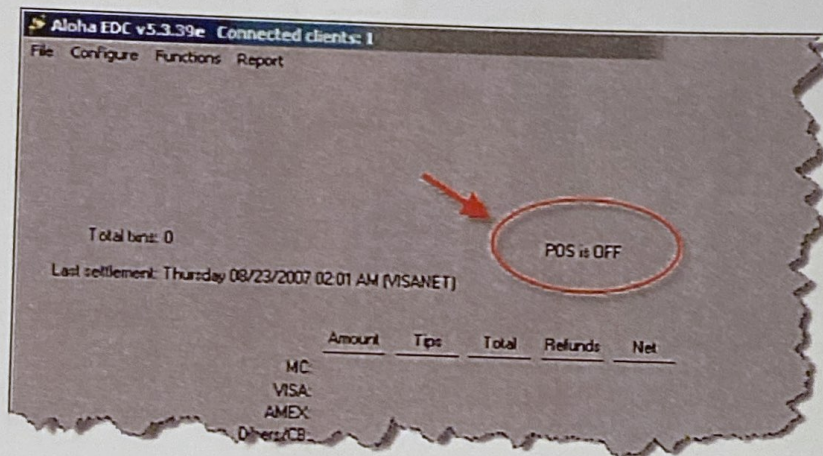
Solution: From the backoffice computer, another manager must clear the password for the manager receiving the invalid password.



EDC Processing offline / credit cards hang while authorizing.

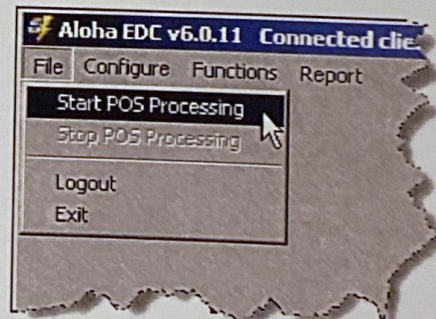
The credit card system has a function to automatically turn POS Processing off if a network outage is detected, which will allow credit cards to be processed off-line (Forced) automatically. During off-line processing, debit cards cannot be accepted -Only credit cards.

Alternate Situation: Registers hang indefinitely while trying to authorize a credit card: Sometimes EDC processing will not Stop processing when needed. This will cause the registers to hang indefinitely when trying to process a credit, debit, or gift card. In this case, performing the below steps should alleviate the problem.



Turn POS Processing back on:

1. Log into EDC.
2. Select **File**.
3. Click on Start POS Processing



If POS Processing turns off after 60 seconds again, leave POS processing off for about an hour -There is definitely a WAN network issue.

If the EDC program does not change back to, "POS processing is off", but registers again hang indefinitely during a credit card transaction, turn POS processing OFF manually from the EDC program for about an hour and start POS processing later to see if networking issues have cleared.

Wide Area Network Down

Solution:

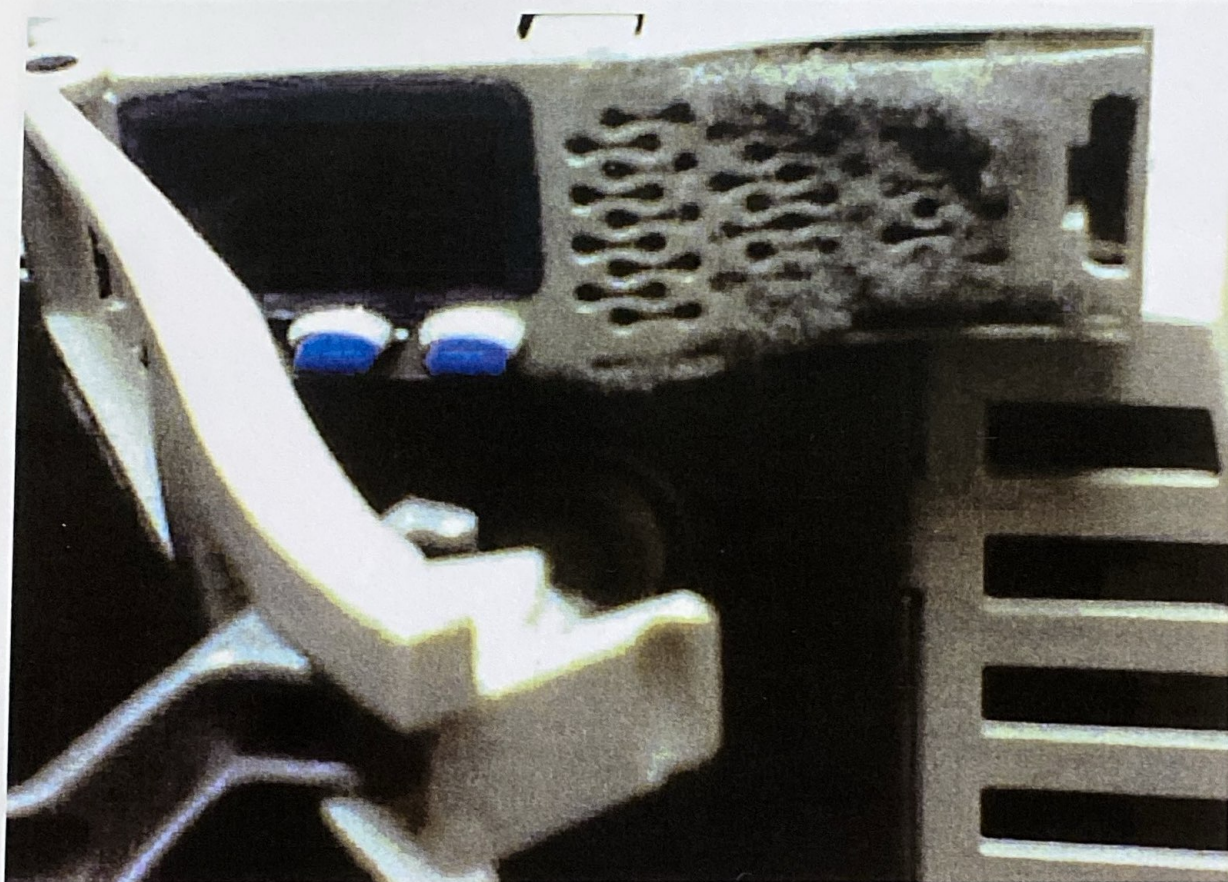
1. Reset power to Router (Typically located in Telephone room).
2. Wait 15 minutes.
3. Check for connectivity
4. Check cable connections to DSL or Frame device.
5. Check cable connections from DSL or Frame device to backoffice PC.
6. **If connection is still down, contact POS with the following information:**
 - a) What status lights are on the DSL modem and what colors are they? (Frame Relay info not required).
 - b) Who should we contact at the store?
 - c) What are the hours of access to the location?

Below is an example of the information and format of a networking incident call that is escalated:

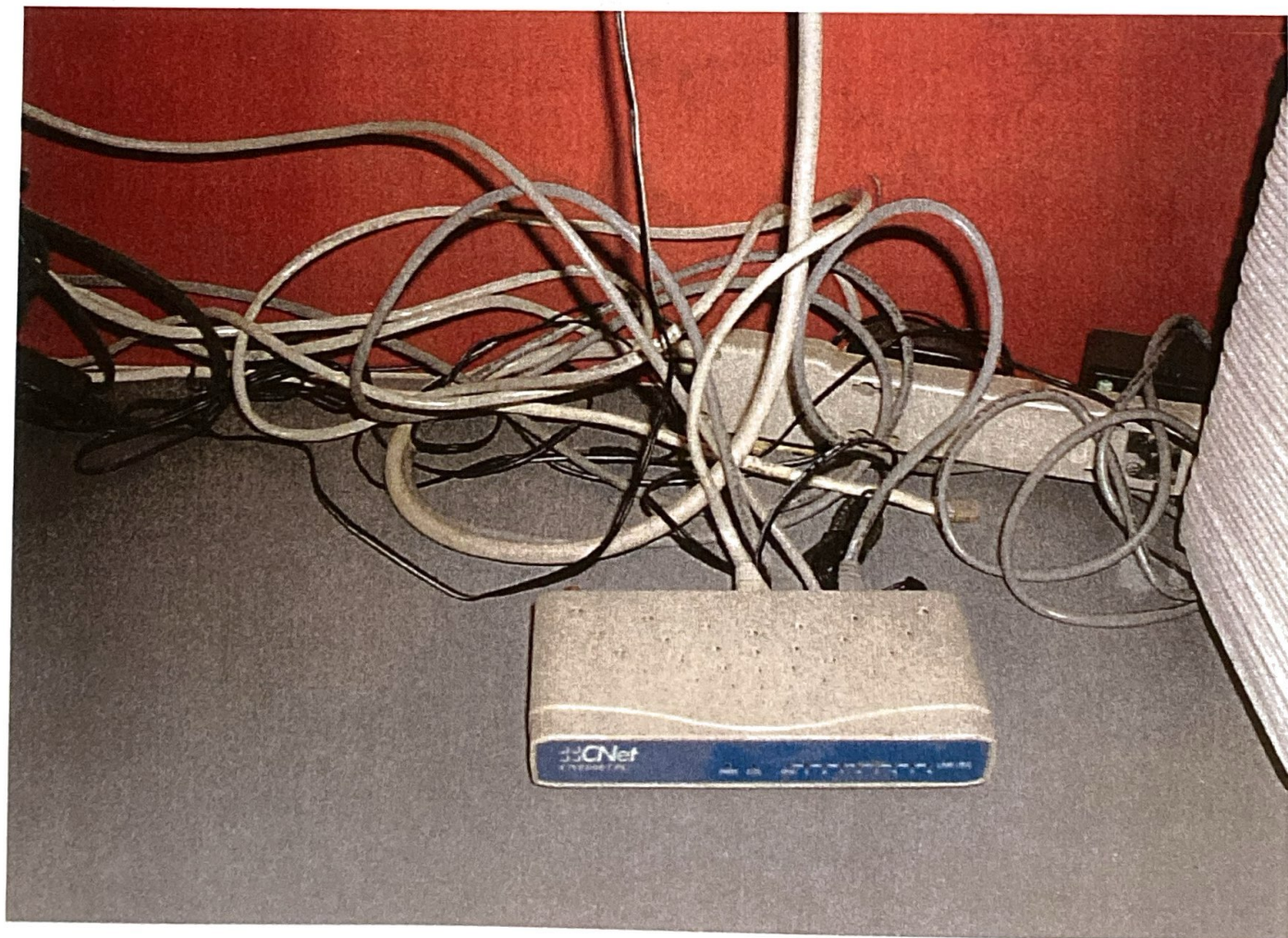
Devin Location 753 Leominster, MA is down.

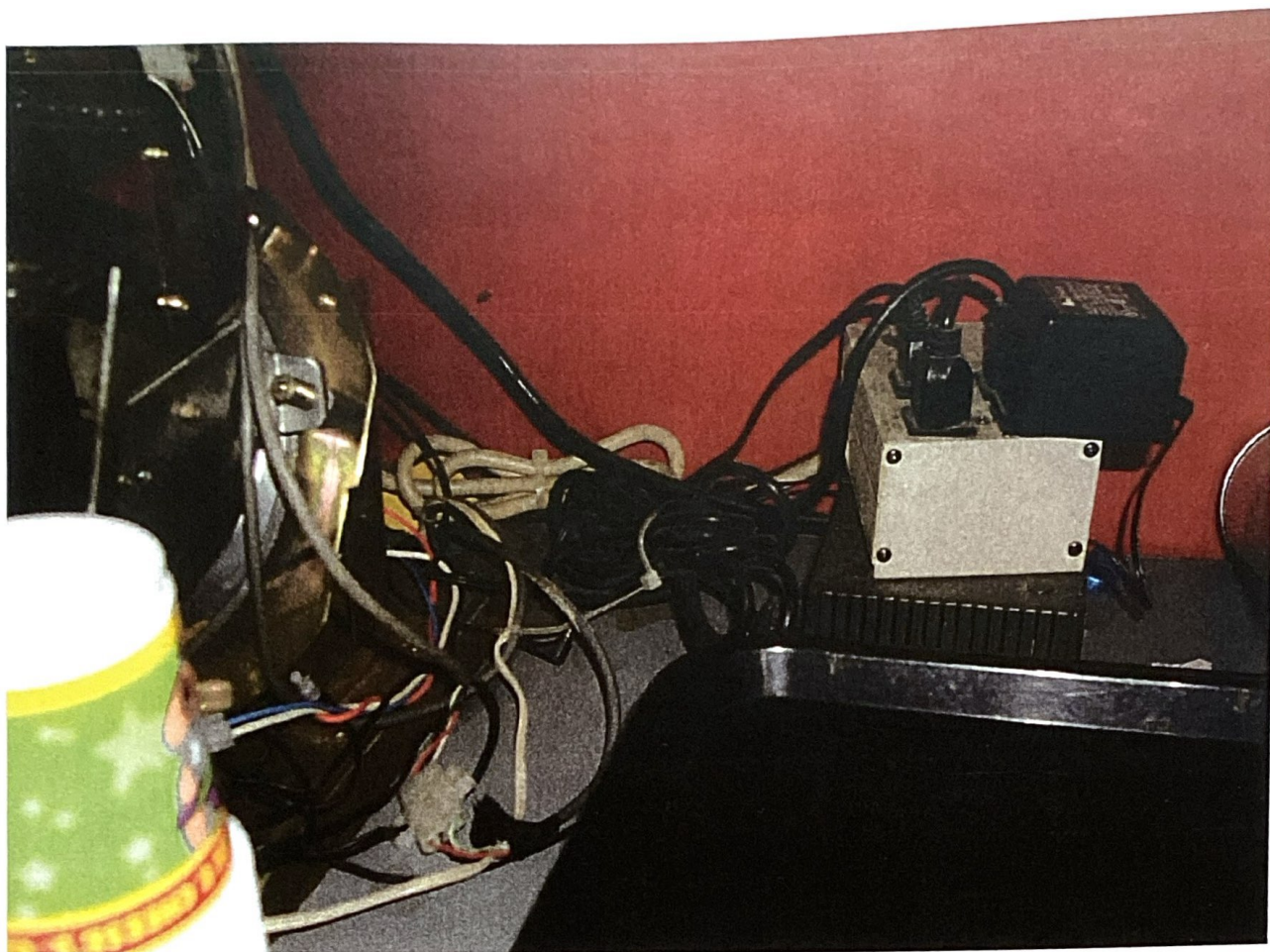
1. The powers is on and the DSL modem was reset with no new results.
2. The cables are plugged in and appear to be in good shape.
3. Tech Manager Dave; Works from 7:30 AM to 4:30 PM Mon thru Fri
510-555-4874
4. The Power, Link, Test, Wan, and LAN are Green

If any of the above information is not available, POS will be unable to have a trouble-ticket started for the WAN connectivity.











CEC POS Helpdesk Portal Documentation

Track-It! Web is designed to allow end-users to track service requests. Track-It! Web is designed to be powerful, yet easy to use. The Web interface takes advantage of easy-to-use graphical controls, although some browser controls may be deactivated depending on which portions of the application you're using.

How to Access Track-It!

Step 1

Connect to CEC VPN.

Step 2

Type the following link in your address bar. Then save the link to your Favorites.

<http://cechelpdesk.cecentertainment.com/TIWEB70/scripts/trackit.asp>

Step 3

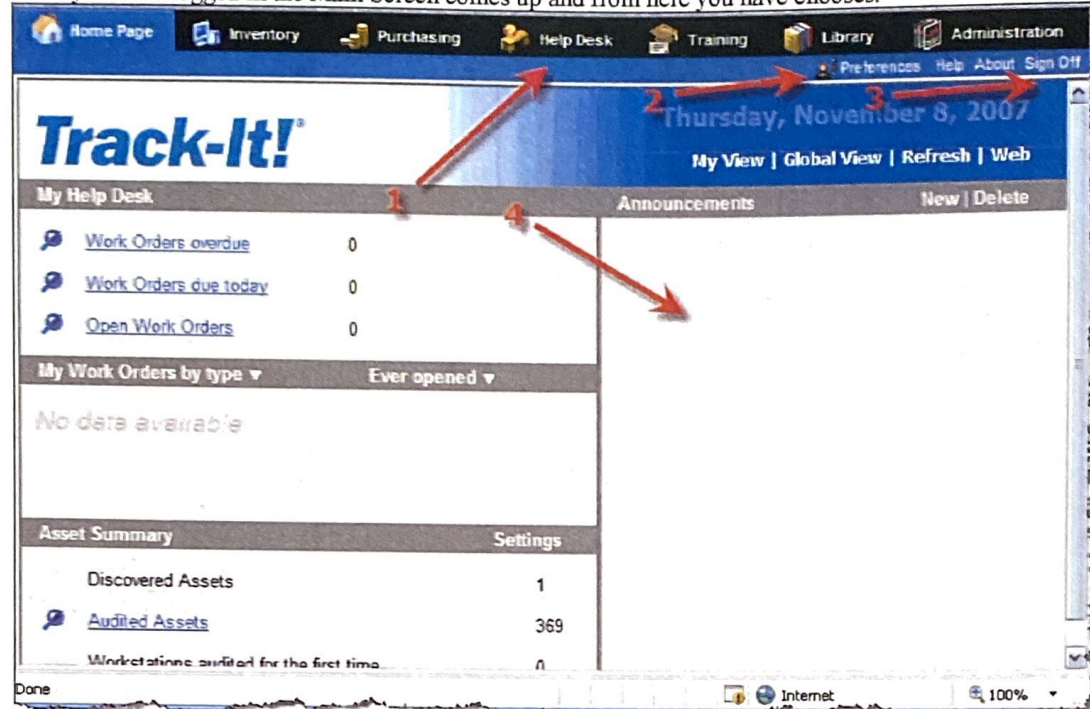
Enter your username and password into the required fields.

POS Support Helpdesk Portal

User Name:	<input type="text"/>
Password:	<input type="password"/>
<input type="button" value="Sign In"/>	

Step 4

Once you have logged in the Main Screen comes up and from here you have chooses.



A general site map on the opening menu gives brief descriptions of Track-It! Web options. Hyperlinks at the top of the view allow you to:

- **1 Helpdesk Icon** – this is where Work Orders can be viewed for your CEC locations.
- **2 Preferences Tab** – Show or Hide the Contents navigational menu
- **3 Sign Off** – Sign-off from the Track-It! Web application
- **4 Announcements area** – POS will post messages from time to time as to updates or global problems that we are working on.

Using Track-It! Self Service

Track-It! Self-Service provides you with the ability to submit work orders if you are a CEC location. By Clicking on the Helpdesk Icon in the Main Screen You can:

- Submit work orders if you are a CEC location
 - Add attachments to those requests
 - View the status of the work orders

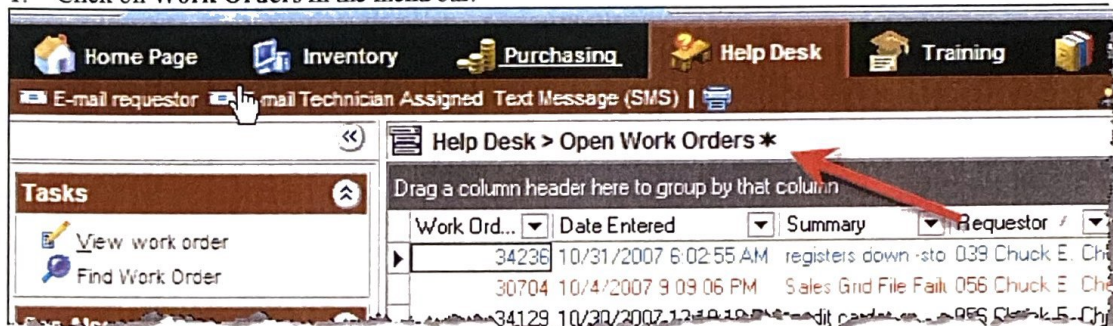
Viewing Previous Requests

With a click of the mouse, you can see all work orders currently in the system for your login (requestor).



To View a Previously Submitted Work Order:

1. Click on **Work Orders** in the menu bar.



2. Click on the **Open Work Orders**, **Closed**, or **All** tab to view your work orders in one of these groups.
3. Click on a **Work Order Number** to view the details of the request. Notice that you can print the work order
4. Click on **Back to Your Work Orders** to close the detail view of a previous request and return to the list view.

The table below provides a description of each of the fields contained in a work order.

Work Order Fields	Description
Field Name	
Summary	A brief statement of the problem, issue, or request.
Type	General identifier for the request (e.g., hardware, software, configuration, training, etc.)
Subtype	More detailed identifier for the request (e.g., failure, upgrade, etc.)
Category	Greatest level of detail for the request (e.g., PC, Macintosh, hard drive, memory, monitor, etc.)
Requestor	Name of the user submitting the work order.
Date Entered	That date that the request is received is recorded here.
Priority	Set a priority code based on your company's business rules.
Date Due	Enter or edit the date that the request should be completed.
Technician Assigned	The name of the technician assigned to resolve the work order.
Date Assigned	The date and time that the request was assigned to a technician or specialist for resolution.
Completed Date	The date and time that a resolution was reached.
Description	Text entered by requestor to describe the problem or request in more detail.
Resolution	A short description of what was done to resolve the issue. This field may include the requested completion date.

Status	The current condition of your work order (e.g., unassigned, assigned, completed, etc.)
Asset ID	A unique identifier for your specific asset.

Submitting a New Request for Service

The Track-It! Web option allows authorized end-users to login and submit new requests for services such as problems, installations, and requests for training. You can also view any outstanding requests. As the request is received at the service provider's desk, Track-It! generates a work order with the information entered on your request. As work orders are completed, they are added to the work order history for your location so that anyone can track the activity on your system.



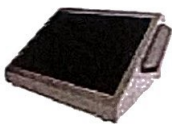
To Create a New Work Order on the Web:

1. Click on **Work Orders** in the menu bar.
2. Click **Add a New Work Order** to open a new work order.
3. Enter a short summary of the problem in the Summary field. Your Requestor login links to the system inventory files to retrieve all relative information for the technician. Type a short description of the problem or request in the Summary field. You can add more details (if necessary) in the Description box at the bottom of the form.
4. Enter a phone number that the technician can reach you at during business hours.
5. Select the Priority, Work Order Type, Sub-Type, and Category from the options in the drop-down lists based on the type of action required. Your installation determines which options are available in these fields.
6. Describe the problem or request in more detail in the Description field.
7. If you want to include a screen capture, document, or anything else that may help explain your problem, click the **Browse** button to locate the file that you want to attach.
8. Click the **Submit** button to create a new work order in the system.
9. A Request Confirmation displays to confirm receipt of the work order and provide the work order number.

Register Terminal Installation Guide

The front-of-house (FOH) Register Terminals may need to be reinstalled to clear software issues or major changes in configuration. This guide will assist in the process of configuring the hardware BIOS settings, Connections, and the installation diskette use.

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POST Installation Troubleshooting



Javelin Viper Terminals BIOS Settings

1. Connect keyboard to keyboard port.
2. Turn terminal on.
3. Press the DEL key when prompted to go into CMOS Setup Menu.
4. Load Optimized Defaults -Answer YES.
5. Verify all options below. -Options in RED will typically need to be changed as shown.

Advanced BIOS Features

Virus Warning = Disabled
CPU L2 Cache ECC Checking = Enabled
Quick Power On Self Test = Enabled
First Boot Device = USB-FDD
Second Boot Device = USB-CDROM
Third Boot Device = HDD-0
Boot Other Device = Enabled
Swap Floppy Drive = Disabled
Boot Up Floppy Seek = Disabled
Boot Up NumLock Status = On
Typematic Rate Setting = Enabled
TypeMatic Rate (Chars/Sec) = 30
TypeMatic Delay (Msec) = 250
Security Option = Setup
Display Full Screen Logo = Disabled
Show Summary Information = Enabled
Display Small Logo = Enabled

Advanced Chipset Features

AGP Aperture Size = 128M
CPU to PCI POST Write = Enabled
Select Display Device = CRT+LCD
Panel Type = 800*600
CPU Direct Access FB = Enabled

Cont...

Integrated Peripherals

Super IO Device
Onboard FDC Controller = Enabled
Onboard Serial Port 1 = 3F8/IRQ4
Onboard Serial Port 2 = 2F8/IRQ3
Onboard Serial Port 3 = 3E8/IRQ5
Onboard Serial Port 4 = 2E8/IRQ10
Onboard Parallel Port = 378/IRQ7
Parallel Port Mode = ECP
ECP Mode Use DMA = 3
Onboard Fast IR = Disabled
Onboard IDE Channel 1 = Enabled
Onboard IDE Channel 2 = Enabled
IDE Prefetch Mode = Enabled
Display Card Priority = PCI Slot
Frame Buffer Size = 32M
AC97 Audio = Auto
VIA OnChip LAN = Enabled
USB Keyboard Support = Enabled
VIA Onboard LAN = Disabled
Onboard Lan Boot ROM = Disabled

Power Management Setup

ACPI Suspend Type = S1(POS)
HDD Power Down = Disabled
Power Management Timer = Disabled
Video Off Option = Suspend -> Off
Power Off by PWRBTN = Instant-Off
Run VGABIOS if S3 Resume = Auto
AC Loss Auto restart = Off

Peripherals Activities

VGA Event = Off
LPT & COM Event = NONE
HDD & FDD Event = On
PCI Master Event = Off
PS2KB Wakeup Select = Hot key
PS2MS Wakeup from S3/S4/S5 = Disabled
PS2KB Wakeup from S3/S4/S5 = Disabled
USB Resume = Disabled
PowerOn by PCI Card = Disabled
RTC Alarm Resume = Disabled
IRQs Activities
Primary INTR = On
IRQ3 (COM 2) = Disabled
IRQ4 (COM 1) = Enabled
IRQ5 (LPT 2) = Disabled
IRQ6 (Floppy Disk) = Enabled
IRQ7 (LPT 1) = Enabled
IRQ8 (RTC Alarm) = Disabled
IRQ9 (IRQ2 Redir) = Disabled
IRQ10 (Reserved) = Disabled
IRQ11 (Reserved) = Disabled
IRQ12 (PS/2 Mouse) = Enabled
IRQ13 (Coprocessor) = Enabled
IRQ14 (Hard Disk) = Enabled
IRQ15 (Reserved) = Disabled

cont...

PNP/PCI Configurations

PNP OS Installed = No
Reset Configuration Data = Disabled
Resources Controlled By = Auto (ESCD)
Assign IRQ for VGA = Enabled
Assign IRQ for USB = Enabled

Frequency/Voltage Control

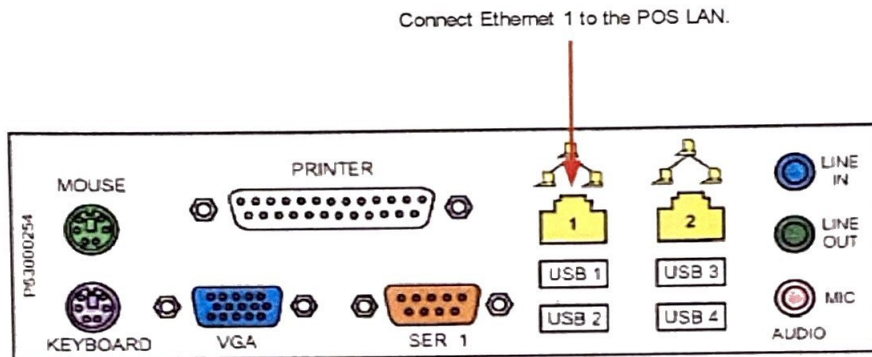
DRAM Clock = By SPD
DRAM Timing = By SPD
DRAM Burst Len = 8
DRAM Voltage = Default
Spread Spectrum = Enabled

Save Settings and EXIT.



Javelin Viper Terminal Hardware Connections

There are two Viper terminal models used, which are the Viper 2.5 and the Viper 3. The only difference between the two models is the outside case design. The lower base section on a Viper 2.5 is made up of two pieces, and the Viper 3 base is a single piece. The electronics, and everything else is the same.

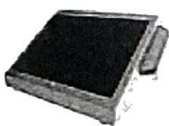


- ETH1** - Ethernet Port #1 for POS Network cable.
- USB1** - Receipt Printer / Floppy Drive during re-installation
- USB2** - Debit Terminal
- USB3** - TODD System

IMPORTANT: A USB-to-Serial adapters must be used to connect all the POS devices to the POS terminal. The devices **MUST** be connected as listed above (ie, USB1 port **MUST** have the receipt printer)



Sewell USB-to-Serial Adapter.
Part: SW-1301



Javelin Wedge Terminals BIOS Settings

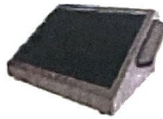
1. Connect a keyboard to the keyboard port of the terminal.
2. Turn the terminal on.
3. When prompted press the DEL key to go into CMOS Setup Menu.
4. Load Optimized Defaults -Answer YES.
5. Verify the options below are set as shown below:

ADVANCED BIOS FEATURES

Virus Warning = Disabled
First Boot Device = USB-FDD
Second Boot Device = USB-CDROM

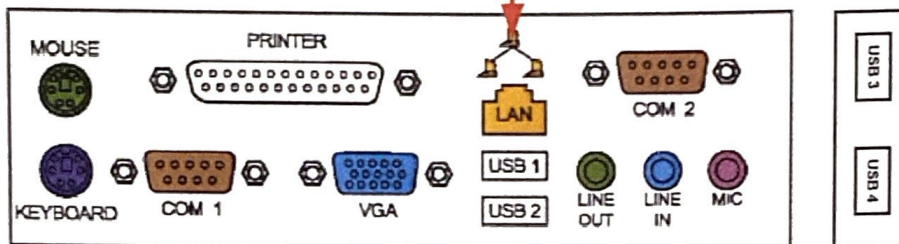
ADVANCED CHIPSET FEATURES

System Bios Cacheable = Enabled
Video Bios Cacheable = Enabled



Javelin Wedge Terminal Hardware Connections

Connect Ethernet to the POS LAN.



ETH1 - Ethernet Port #1 for POS Network cable.
USB1 - Receipt Printer / Floppy Drive during re-installation
USB2 - Debit Terminal
USB3 - TODD System

IMPORTANT: A USB-to-Serial adapters must be used to connect all the POS devices to the POS terminal. The devices **MUST** be connected as listed above (ie, USB1 port **MUST** have the receipt printer)



Sewell USB-to-Serial Adapter.
Part: SW-1301



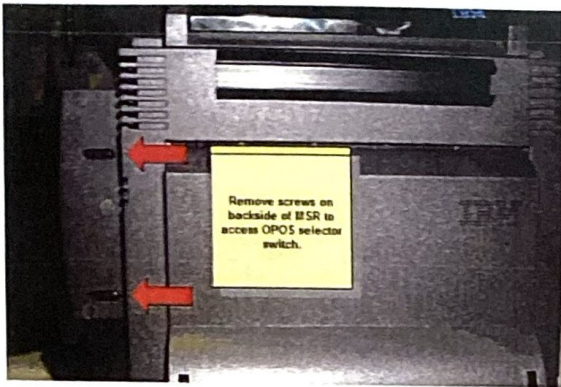
IBM SurePOS Series Terminals BIOS Settings

1. Turn terminal ON.
2. Tap screen twice to go into setup when prompted.
3. Verify the options below are set as shown below:
4. Select, "Load Setup Defaults"
5. Save and Exit.

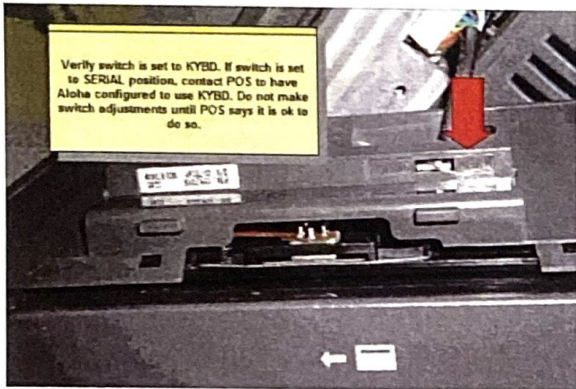
-Save and exit. (Loading Default options are all that is required).

IBM SurePOS MSR Configuration

The IBM SurePOS terminal supports two different modes of operation. One mode is called, "Serial OPOS", and the other mode is called, "Keyboard Wedge". Due to changes in the Aloha software, all IBM SurePOS terminals will need to be configured to operate under Keyboard Wedge mode only, otherwise, credit cards will not be accepted by the SurePOS terminals after the next Aloha software update is installed.



Disconnect the MSR module, by removing the two mounting screws on the backside of the MSR.

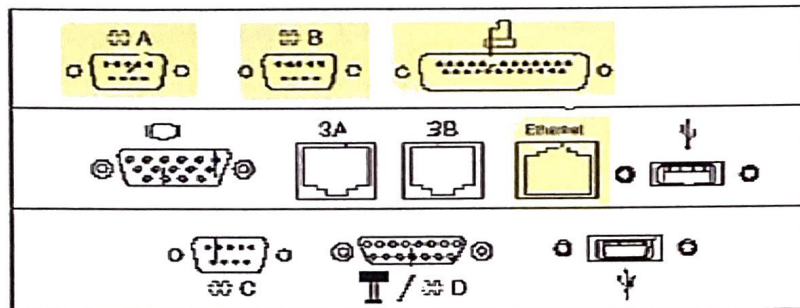


Look for the, "SERIAL / KYBD" switch on the side of the MSR that faces the body of the POS Terminal. If the switch is not in the KYBD position, change it to KYBD.

Re-assemble MSR to terminal.



IBM SurePOS Series Terminals Connections



A Verifone Cable
 B Todd Cable
 Receipt Printer Cable
 Not Used
 3A Not Used
 3B Not Used

Ethernet POS Ethernet Cable
 Not Used
 Not Used
 Not Used
 Not Used
 Not Used

Verifone debit terminal and TODD token dispenser will connect directly to the serial port on the IBM 4695 terminal.

The receipt printer must be connected to the parallel port. This requires either a parallel-to-serial converter between the terminal and the printer, or the receipt printer having a parallel port installed.



IBM 4695-3xx Terminals BIOS Settings

1. Turn terminal on.
2. Tap the F1 button on the top corner of the screen when appears.
3. Load default CMOS settings.
4. Verify all options below. -Options in RED will typically need to be changed as shown.



The F1 pad on that appears during startup

Devices and I/O Ports

```
Serial Port A = [Port 3F8, IRQ 4 (COM1) ]
Serial Port B = [Port 2F8, IRQ 3 (COM2) ]
Parallel Port = [ Manual Configuration ]
Parallel Port Mode = [ ECP ]
Parallel Port IO Port = [ Port 378 ]
Parallel Port IRQ = [ IRQ 7 ]
Parallel Port DMA = [ DMA 1 ]
Diskette Controller = [ Enabled ]
Hard Disk Spin Down Timeout = [Disabled ]
Hard Disk 0 Transfer mode selection = [Automatic ]
```

Start Options

```
Keyboard NumLock State = [ On ]
Keyboard Speed = [ Fast ]
Disketeless Operation = [ Enabled ]
Mouse/Keyboardless Operation Mode = [ Enabled ]
First Startup Device = [ Diskette Drive ]
Second Startup Device = [ Hard Disk 0 ]
Third Startup Device = [ Disabled ]
Fourth Startup Device = [ Disabled ]
Network Protocol = [ TCP/IP Bootp ]
Setup Prompt = [ Enabled ]
Power On Self Test = [ Quick ]
Virus Detection = [ Disabled ]
```

Device Channel

```
Interrupt Level = [ IRQ 11 ]
System memory = [ 8 kb ]
Memory address = [ DC000 ]
```

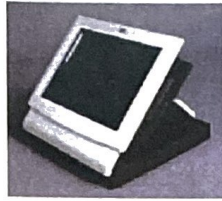
Plug and Play

```
Plug and Play adapter configuration = [ Disabled ]
```

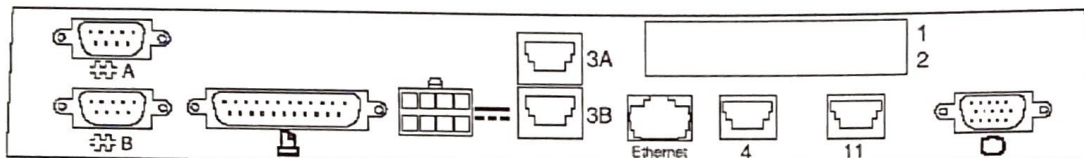
Power Management

```
APM BIOS Mode = [ Disabled ]
Wake Up on LAN = [ Disabled ]
```

-Save settings and EXIT.



IBM 4695-3xx Terminals BIOS Settings



⚡ A Verifone Cable

⚡ B Todd Cable



Receipt Printer Cable



Power Cable

3A Not Used

3B Not Used

Ethernet POS Ethernet Cable

4 Customer Display Cable

11 Not Used

Not Used

1 Not Used

2 Not Used

Verifone debit terminal and TODD token dispenser will connect directly to the serial port on the IBM 4695 terminal.

The receipt printer must be connected to the parallel port. This requires either a parallel-to-serial converter between the terminal and the printer, or the receipt printer having a parallel port installed.



Creating the Terminal Installation Diskette

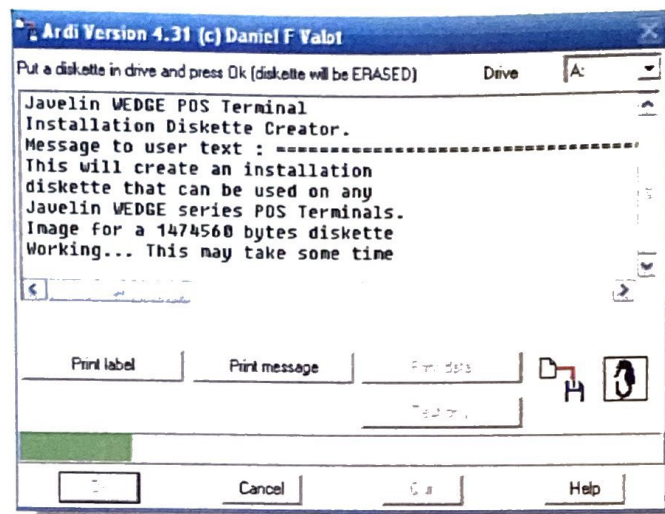
To re-install the FOH register terminal, you will need to create an installation diskette. There are different installation diskettes available. The proper diskette that matches the register terminal you are needing to install must be selected, otherwise the installation will not be successful.

To Create a FOH (Front Of House) Register Installation Diskette:

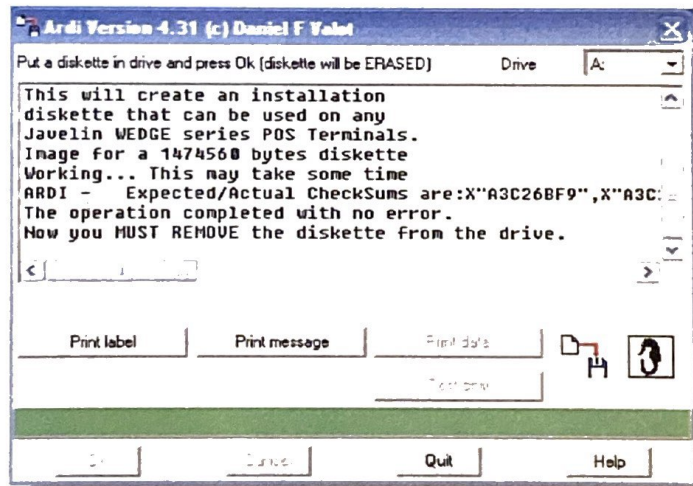
1. Go to the backoffice computer.
2. Click on the Start Menu and Navigate to the POS Hardware section.
3. Select the installation diskette for the register terminal model that you need to install.



Insert a blank diskette into the backoffice computer disk drive, and click OK to start the diskette creator.



Once you click the OK button for the diskette to be written, a green progress bar should start appearing. If the bar turns RED at anytime, then the diskette is bad and you will need to try a different diskette.



Now that the diskette has been completely written, it is now safe to remove the diskette and click on the QUIT button to close this window.

Take the diskette to the register terminal you wish to re-install.

If you are using a Javelin register terminal, turn the terminal off and connect the USB diskette drive to USB port #1.

Insert the diskette into the diskette drive of the register terminal and turn the power ON.



Using The Terminal Installation Diskette

The terminal installation program runs in two parts:

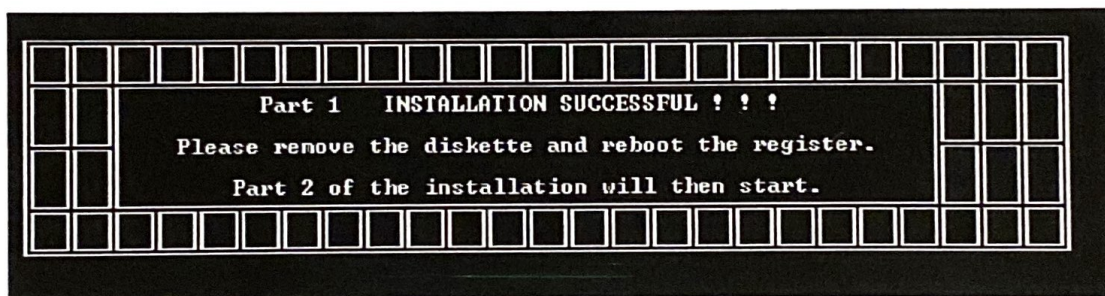
- Step 1 - Image injection
- Step 2 - FOH Installation

When the installation disk is first inserted into the terminal's drive and the power is turned on, the installation disk will immediately attempt to connect to the backoffice fileserver and access the information to load the terminal completely from scratch.

A screen will appear during this process and display the progress of the hard drive injection.

WARNING: Do NOT initiate an installation on more than one terminal at a time. The installation diskette logs onto the network with a specific name, and if two copies of the same name are used, neither terminal will install.

Once you get the following message, remove the diskette from the drive and reboot the terminal.



Nothing like success!

PLEASE NOTE: Once the terminal reboots, hardware detection may take place. If hardware detection messages appear, (ie, Windows has detected new hardware...) and you are prompted for a choice, answer all the questions by tapping on the NEXT pad. The touchscreen driver may not be loaded when the first message appears, so wait about 10 seconds and then try to answer the question again.

If the prompt asking if you would like to restart the computer appears, tap YES.



Part 2 of the Register Terminal Installation.

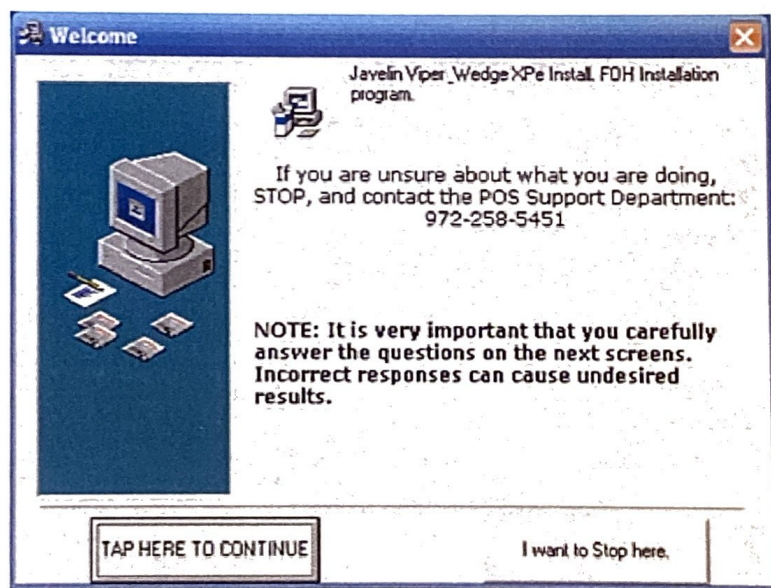
During the terminal installation, you will be asked two questions, that you can answer by making the proper selection on the touchscreen.

1. How Many terminals are installed?
2. What terminal number would you like to assign?

Typically, locations have 4 terminal (3 at the front counter and one at merchandise), so the total number of terminals would be 4.

PLEASE NOTE: Each terminal must be assigned a number. No two terminals can be assigned the same number (Two terminals with the same ID Number will knock both terminals out), a network error message will appear. One of the terminals will need to be reinstalled for this problem to go away.

When the Terminal Installation program starts, the below greeting message will appear:



Typical Welcome message from Terminal Installer


The program is very straight-forward. Just follow the prompts carefully, and the install will go through just fine.

I would recommend you wait about 10 to 15 seconds after this message appears before tapping the continue pad. This will help ensure the touchscreen drivers and automation utilities have loaded before the installation is started.

How many terminals are installed at this location? Below is question #1 that you will be asked.

How Many Terminals at this location?

Enter the total number of register terminals installed.



Each Register terminal needs to know the grand total of all register terminals used at this location.

EXAMPLE:

A typical Chuck E. Cheese location has 3 order terminals, and 1 merchandise terminal. The answer for this prompt would then be, "4".


2	3
4	5
6	7
8	9

How Many terminals are there?

Question #2: What number does this terminal need to be assigned?

What Number Does this Terminal Need to be?

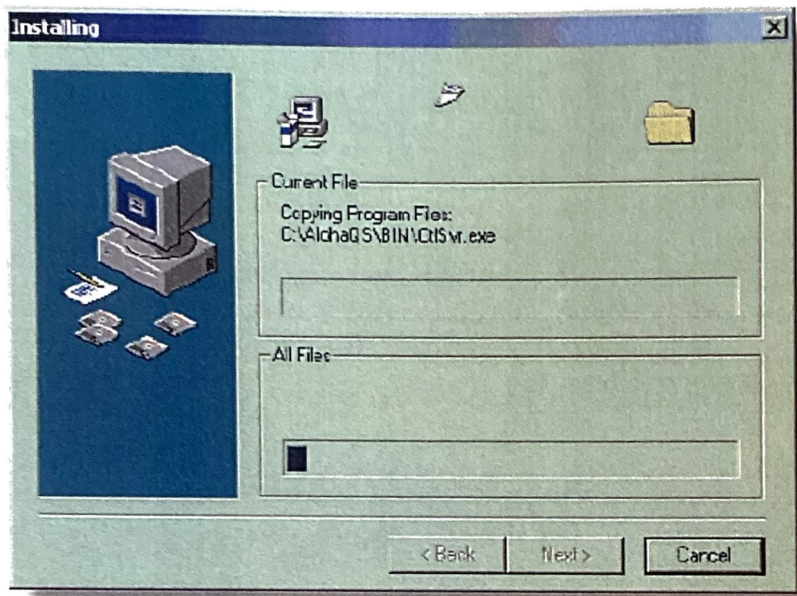
Select the number you would like to assign this terminal.



TERM 1	TERM 2	TERM 3
TERM 4	TERM 5	TERM 6
TERM 7	TERM 8	TERM 9

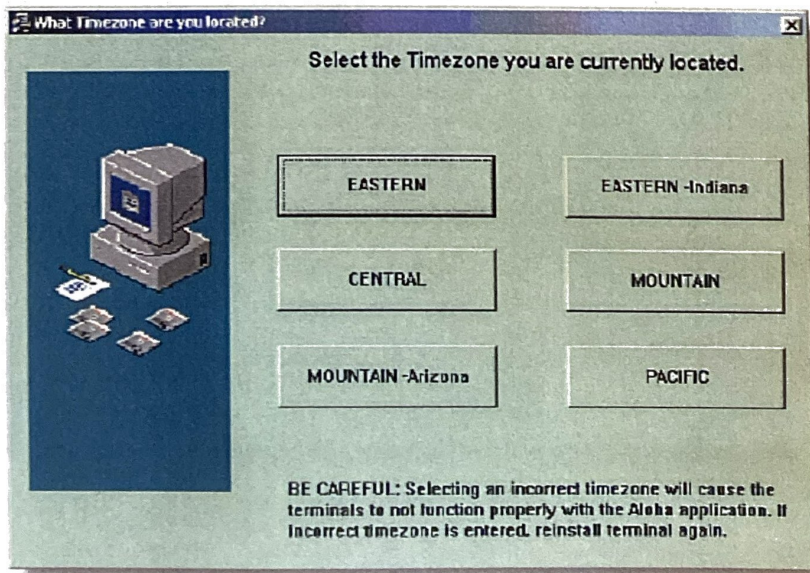
BE CAREFUL: No two register terminals can share the same Identity. Problems will occur if two or more terminals try to run with the same identity.

PLEASE NOTE: If after answering both questions, the register installation appears to do nothing, or a new screen with configuration questions appears and does nothing, then the automation feature did not start. Don't panic. Just turn the terminal off and then back on. The installation program will restart and you will just have to enter the last two questions again, and the installation will begin. This will happen once in a while.

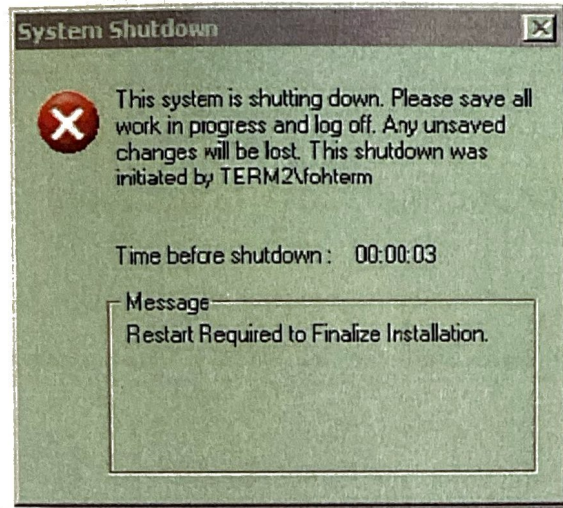


Installation in progress.

The final question you will be asked is what Timezone you are located in. This is an important question to answer so the terminals will all be using the same timezone information to stay in synchronization with each other.



Finally, after the installation process has completed, the register terminal should reboot. You will be given a few second warning that the terminal is about to restart.



Terminal restarting.

After that reboot, the terminal may boot up and restart a couple more times as it is synchronizing itself with the entire POS system. This is totally normal.

After that, the final startup will have the terminal started with a floating logo screensaver.



Post Installation Troubleshooting Tips:

If the floating logo appears, and a logo is not bouncing around on the screen, check two things:

1. Network Connection problems.
2. The MSR (Credit card swipe) is either faulty and/or not connected firmly. Repair and restart the terminal.

Terminal seems to hang for about 8 minutes during startup at the message, "Detecting Peripherals".

1. The MSR (Credit card swipe) is either faulty and/or not connected firmly. Repair and restart the terminal.

Terminal(s) keep rebooting and will not stop rebooting (More than four times in a row).

1. Possible exiting file issue. Contact POS Support for assistance.

Cash Drawer Repair Guide

This guide should help you start from diagnosing if you have a cash drawer problem to repairing the drawer if you do. You can use this guide for repairing or just as general guide for refurbishing your drawer.

GUIDE CONTENTS:

Determining if the Cash Drawer needs repair.....	Pg 2
Case.....	Pg 6
Cash Drawer Legs.....	Pg 10
Front Plate.....	Pg 13
Drawer Wiring.....	Pg 16
Springs.....	Pg 24
Rails and Bearings.....	Pg 27
Bumper Stop for Solenoid Latch.....	Pg 32
Lock Bar.....	Pg 34
Lock.....	Pg 38
Inner Drawer Latch Plate.....	Pg 43
Parts List.....	Pg 44
POS Support Link.....	Pg 45

Determining if you have a Cash Drawer problem.

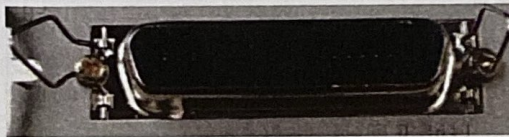
Each section is setup with Steps and procedures under each step. Each step will ask you to identify if a problem exists. If the step is working you will proceed to the next step. If it does not then you will follow the procedures for resolving that issue. At the end of going through this troubleshooting you should have a link to the page to repair the problem.

There are multiple configurations we use in the field. First we need to determine your hardware setup.

Does your printer have a serial connection or parallel?



Serial Port



Parallel Port

If you have serial printers, do you have USB cables on your register?



USB to Serial adapter

SERIAL PRINTER WITHOUT USB

Issue: Cash drawer does not open.

1) Does the receipt printer print?

YES continue to Step 2, NO move to procedure 1A.

1A: Reset the power on the SMP1000.

1B: The next step is to place a known working printer at this position. If the problem goes away, make sure the original printer has the same problem somewhere else. If it does then the problem was the printer. If it does not then a cable may have been loose, and in moving was re-seated.

1C: If the problem remains with a known working printer. Next you will swap the SMP1000 parallel converter with a known working one. If the problem goes away, make sure the original SMP1000 has the same problem somewhere else. If it does then the problem was the SMP1000. You would next want to make sure the DIP switches and DCE/DTE witch have not moved. If the problem does not follow, then a cable may have been loose, and in moving was re-seated.

1D: Next step is checking the cables. Again you will do this by swapping with a known working position. The printer cable from the register is the first one to swap. This cable runs from the register to the SMP1000 parallel converter, and from the other end of the SMP1000 you have second cable. The cable from the SMP1000 to the printer is a DB9 to DB25 a serial; this is the second one to swap.

****There is a 9 to 25 converter on this cable also. **** Lastly swap the SMP1000 power supply if the problem is not a cable.

1E: The last item to test is the register. Move it to a known working position and see if it will print and fire the cash drawer. If it works, you need to go through the troubleshooting again as something was missed. If it does not work, check to make sure the CMOS settings match your other registers. Lastly re-install the terminal.

2) Can you hear the solenoid firing?

YES continue to Step 3, NO move to step 2A.

2A: Check that the clip on the RJ12 cable to the printer is not broken or loose. If it is, replace the RJ11 cable. (Page 16)

3) Is the drawer sliding forward?

NO move to procedure 3A.

3A: Check that all the legs on the bottom are there. If any are missing it will make the drawer out of balance and the drawer will not slide forward on it's own. (Page 10)

3B: Check to make sure all 6 screws are on the bottom of the drawer.

3C: Check that the rails are lubricated properly with a silicone based lubricant and not bent. (Page 27)

3D: Check that the bearing packs are not damaged or missing bearings. Make sure they slide down the track. (Page 27)

3E: Check the spring to make sure it is not weakened or broken and can push the drawer forward. (Page 24)

SERIAL PRINTER WITH USB

Issue: Cash drawer does not open.

1) Does the receipt printer print?

YES continue to Step 2, NO move to procedure 1A.

1A: Next procedure is to put a known working printer at this position. If the problem goes away, make sure the original printer has the same problem somewhere else. If it does then the problem was the printer. If it does not then a cable may have been loose, and in moving was re-seated.

1B: Next step is checking the cables. Again you will do this by swapping with a known working position. The serial cable from the register is the first one to swap. If the problem doesn't follow it, then swab the USB to serial cable.

1C: The last item to test is the register. Move it to a known working position and see if it will print and fire the cash drawer. If it works, you need to go through the troubleshooting again as something was missed. If it does not work, check to make sure the CMOS settings match your other registers. Lastly re-install the terminal.

2) Can you hear the solenoid firing?

YES continue to Step 3, NO move to step 2A.

2A: Check that the clip on the RJ12 cable to the printer is not broken or loose. If it is, replace the RJ11 cable. (Page 16)

3) Is the drawer sliding forward?

NO move to procedure 3A.

3A: Check that all the legs on the bottom are there. If any are missing it will make the drawer out of balance and the drawer will not slide forward on it's own. (Page 10)

3B: Check to make sure all 6 screws are on the bottom of the drawer.

3C: Check that the rails are lubricated properly with a silicone based lubricant and not bent. (Page 27)

3D: Check that the bearing packs are not damaged or missing bearings. Make sure they slide down the track. (Page 27)

3E: Check the spring to make sure it is not weakened or broken and can push the drawer forward. (Page 24)

PARALLEL PRINTER

Issue: Cash drawer does not open.

1) Does the receipt printer print?

YES continue to Step 2, NO move to procedure 1A.

1A: Next procedure is to put a known working printer at this position. If the problem goes away, make sure the original printer has the same problem somewhere else. If it does then the problem was the printer. If it does not then a cable may have been loose, and in moving was re-seated.

1B: Next step is checking the cable. Again you will do this by swapping with a known working position. Swap the printer cable from the register to the first printer with a known working one from another position.

1C: The last item to test is the register. Move it to a known working position and see if it will print and fire the cash drawer. If it works, you need to go through the troubleshooting again as something was missed. If it does not work, check to make sure the CMOS settings match your other registers. Lastly re-install the terminal.

2) Can you hear the solenoid firing?

YES continue to Step 3, NO move to step 2A.

2A: Check that the clip on the RJ12 cable to the printer is not broken or loose. If it is, replace the RJ11 cable. (Page 16)

4) Is the drawer sliding forward?

NO move to procedure 3A.

3A: Check that all the legs on the bottom are there. If any are missing it will make the drawer out of balance and the drawer will not slide forward on it's own. (Page 10)

3B: Check to make sure all 6 screws are on the bottom of the drawer.

3C: Check that the rails are lubricated properly with a silicone based lubricant and not bent. (Page 27)

3D: Check that the bearing packs are not damaged or missing bearings. Make sure they slide down the track. (Page 27)

3E: Check the spring to make sure it is not weakened or broken and can push the drawer forward. (Page 24)

CASH DRAWER CASE

Missing screws from the bottom of the case can cause problems with the operation of the cash drawer. Keeping the case clean and put together correctly will help with its operation.

Example of case problems:

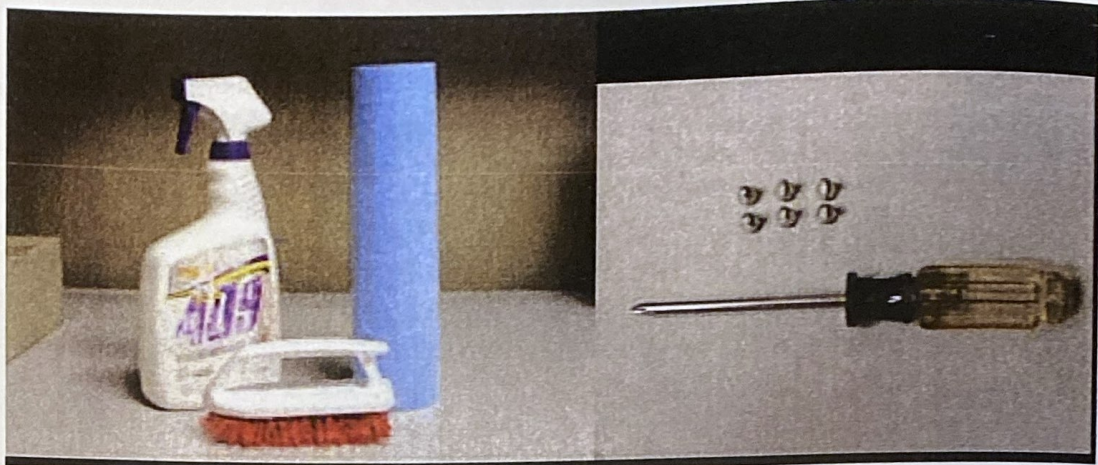


Missing screws holding the base in place.



Dirty case

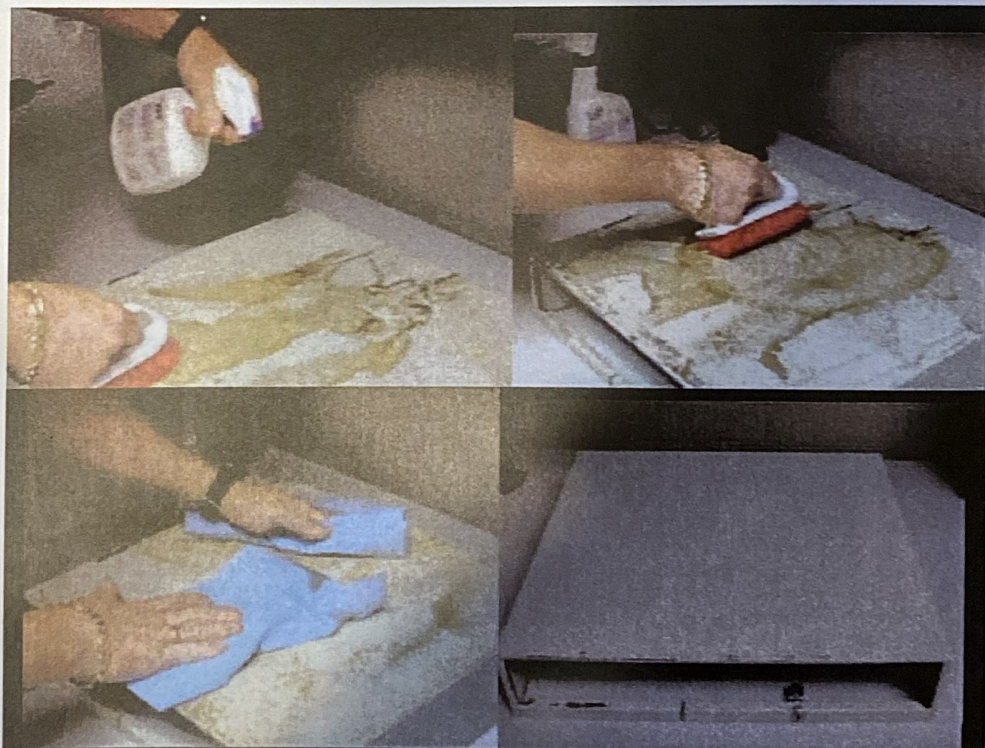
Parts /Tools Needed:



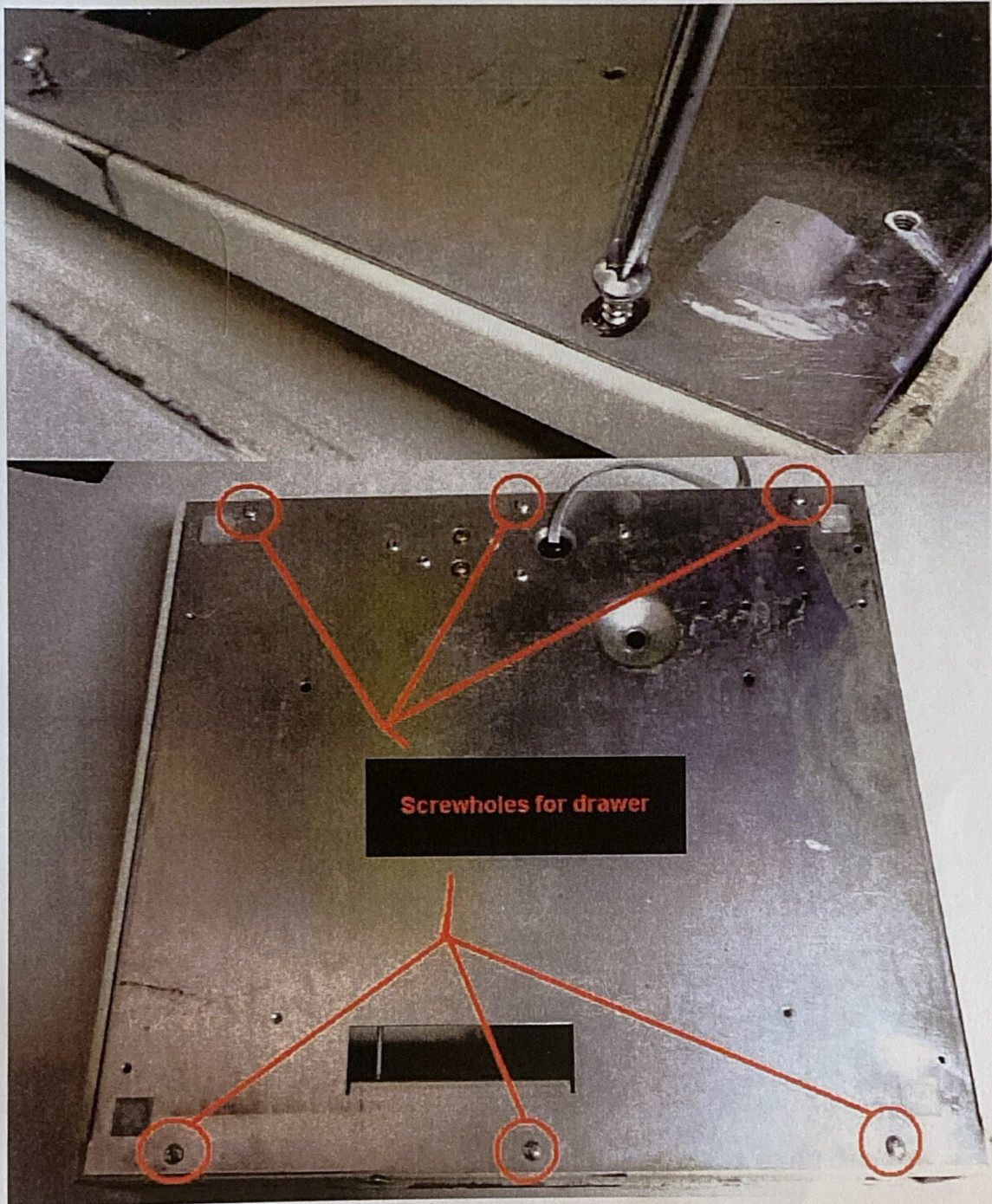
- 1) Scrubbing brush
- 2) 409/Windex or other cleaning product
- 3) Shop towels
- 4) Phillips head screwdriver
- 5) Six #10 x 1/2 self tapping screws

Installation:

- 1) Spray the case down with cleaning solution and brush the case. Wipe clean with your shop towel.



2) Replace any missing screws.

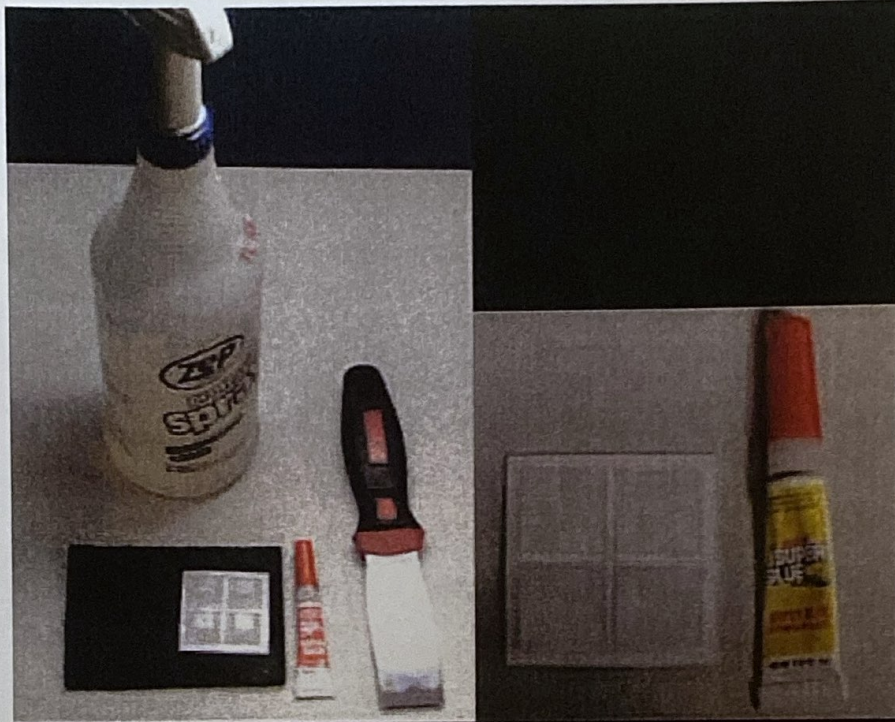




CASH DRAWER LEGS

Replacing worn and missing legs is an important step to repairing your cash drawer. Missing legs can cause the cash drawer to be out of balance and not push the drawer forward as it should.

Tools / Parts Needed:

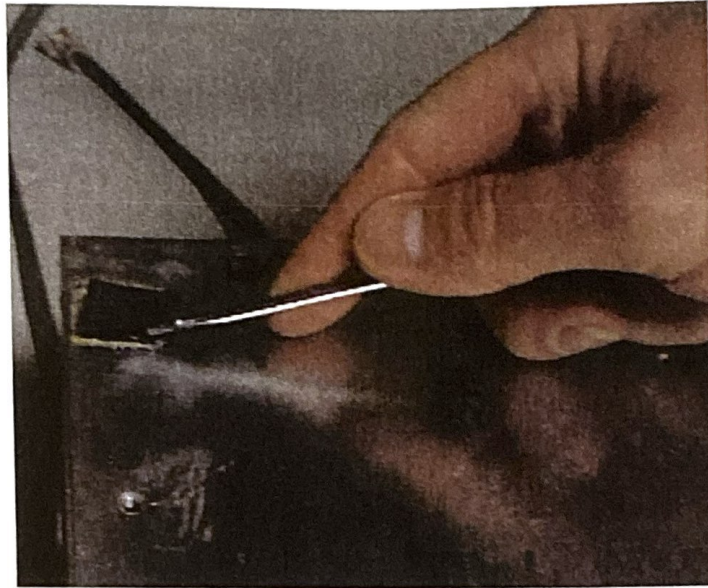


*You can purchase replacement legs from Home Depot or any other hardware store.

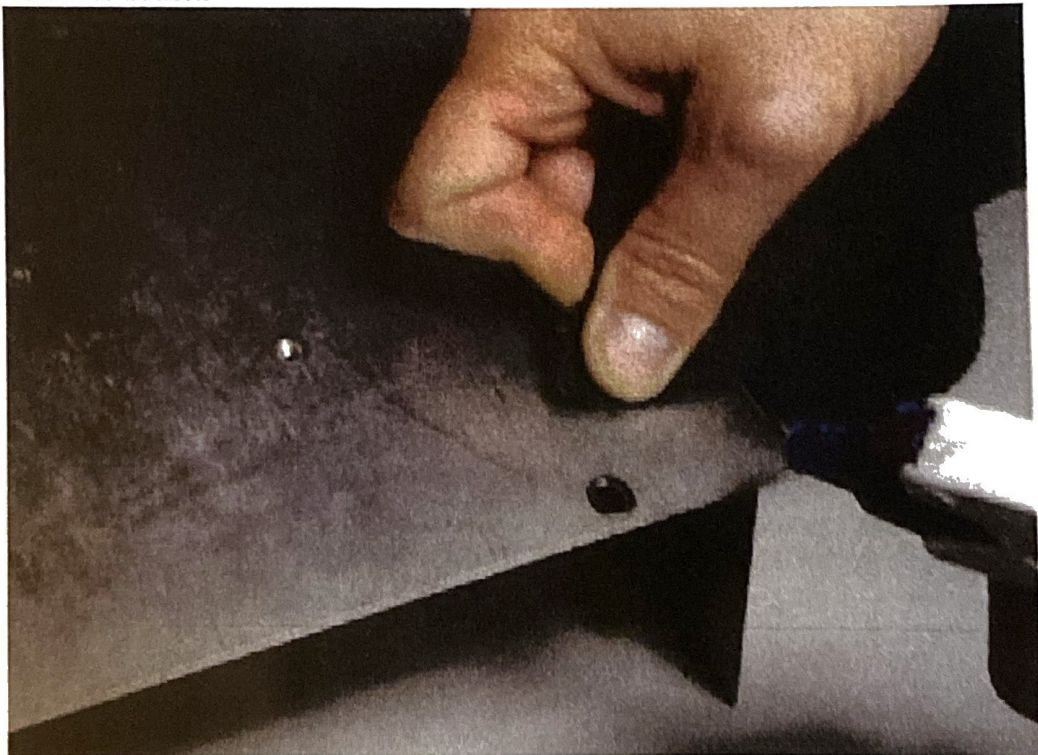
- 1) Replacement legs
- 2) Superglue
- 3) Scraper / Razor / screwdriver
- 4) Steel wool / Rubber brush
- 5) 409 / Windex / Other cleaning solution
- 6) Shop towel

Installation:

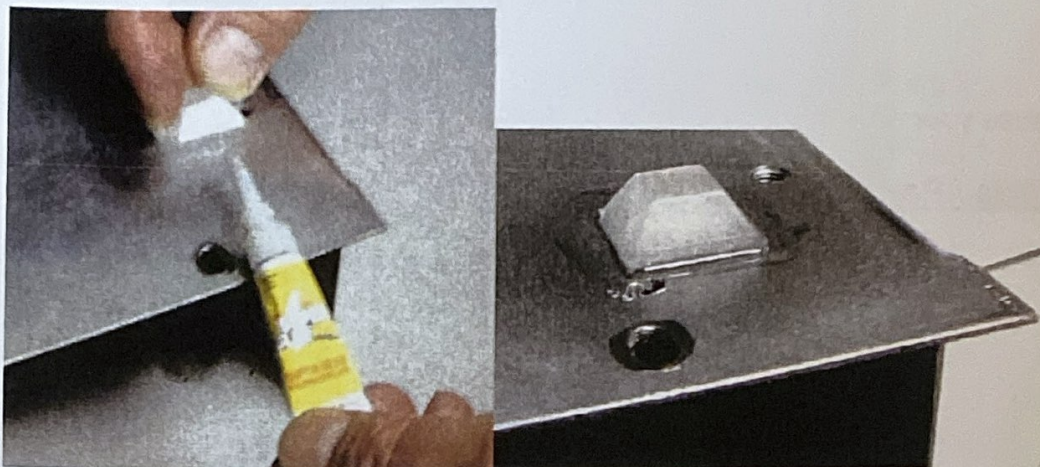
- 1) First you will need to remove the old legs from the bottom. You can do this with a scraper, razor, or screwdriver.



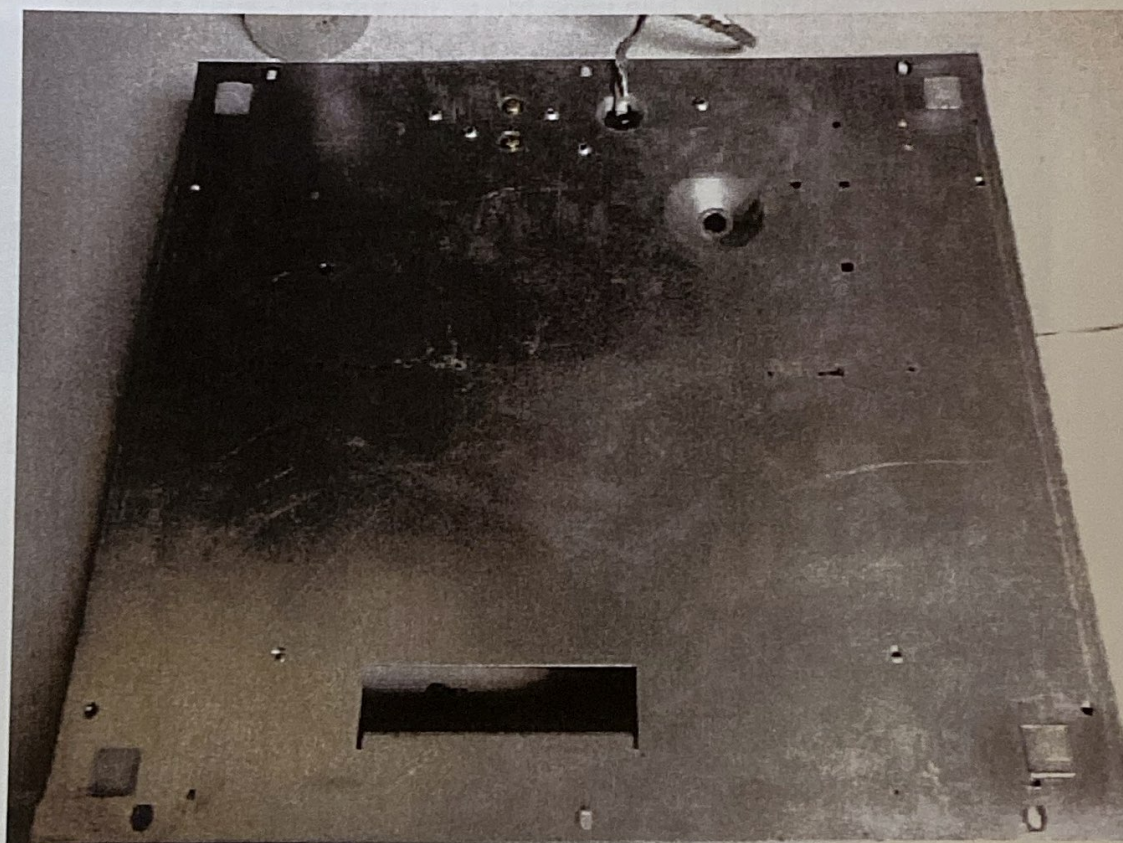
- 2) Clean the bottom of the drawer with cleaning solution (Windex, 409, etc), use an abrasive to remove old glue and rubber such as steel wool, or rubber brush.



- 3) Apply a small amount of superglue to the bottom of the replacement leg and place in between the two screw holes in the corner. If you swirl the leg in a circular motion while placing, you will ensure a good even coverage of glue on the leg.



4) Your finished product should look like this.



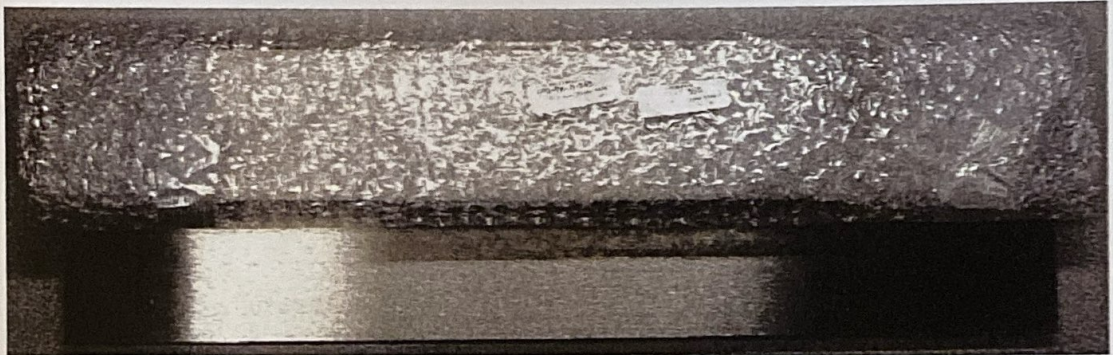
CASH DRAWER FRONT PLATE

If the front plate is missing rivets or not set flush to the drawer till it can cause your drawer to not open or shut properly.

Tools / Parts Needed:



- 1) 5mm Nut driver (Blue)

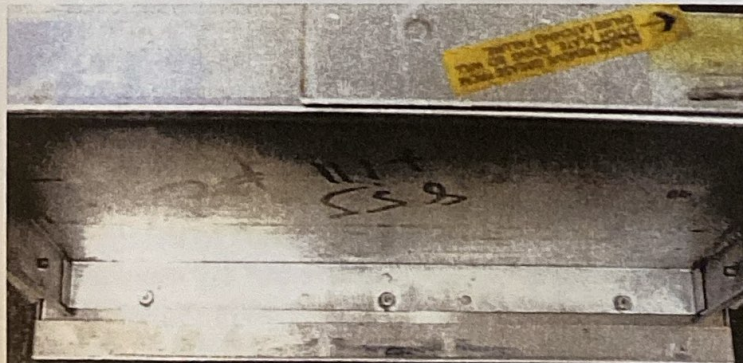


***Replacement front plates can be ordered from the POS Department through the [POS Support link \(Page 45\)](#) if the rivets have broken on your drawer.**

- 2) Replacement front plate

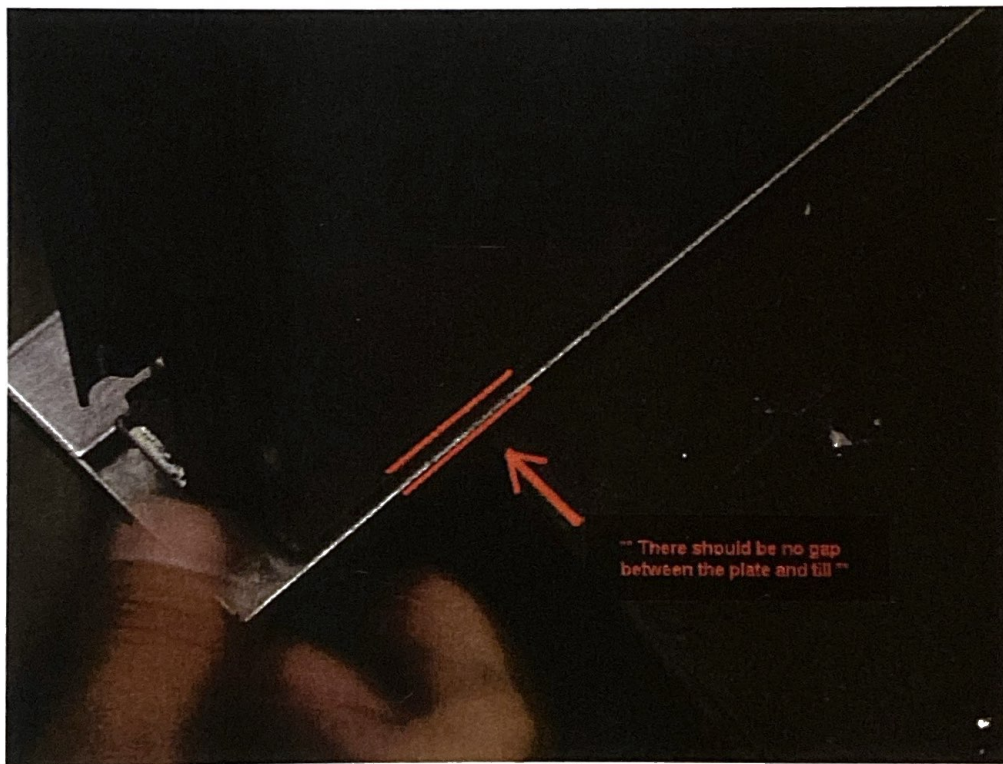
Installation:

- 1) Remove the old front plate with the nut driver.

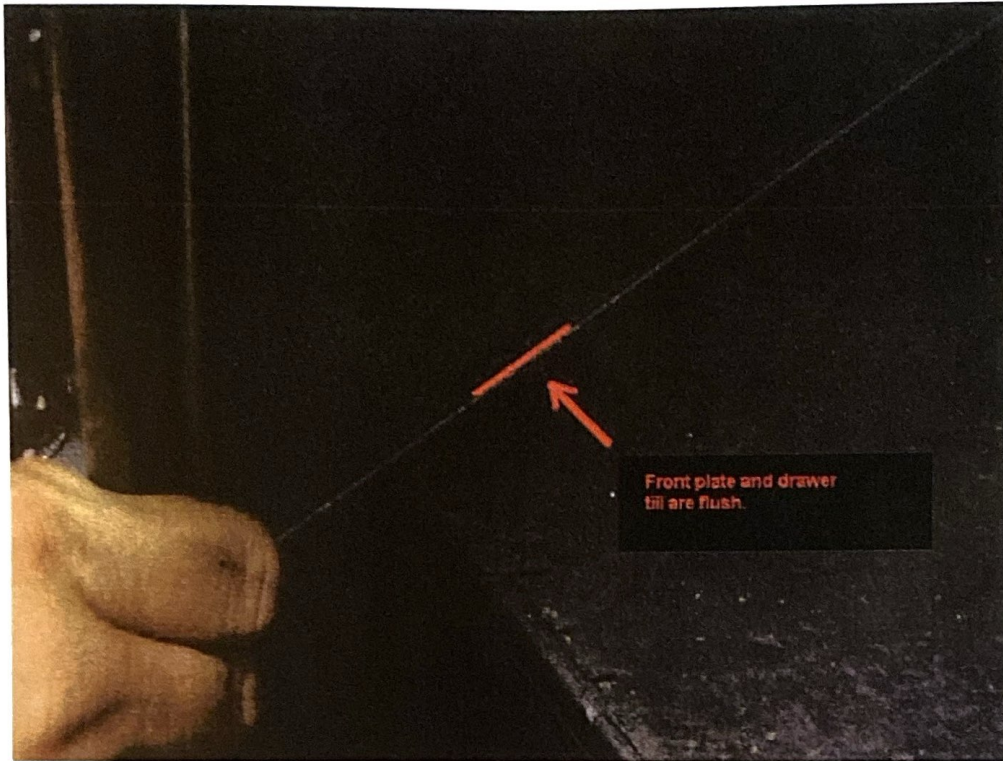




- 2) Install the new front plate. ****Be very careful to make sure the bottom of the front plate and the bottom of the drawer are flush. If they are not, this can cause the drawer to not open and shut properly. ****



Incorrect: Drawer and Plate are not flush



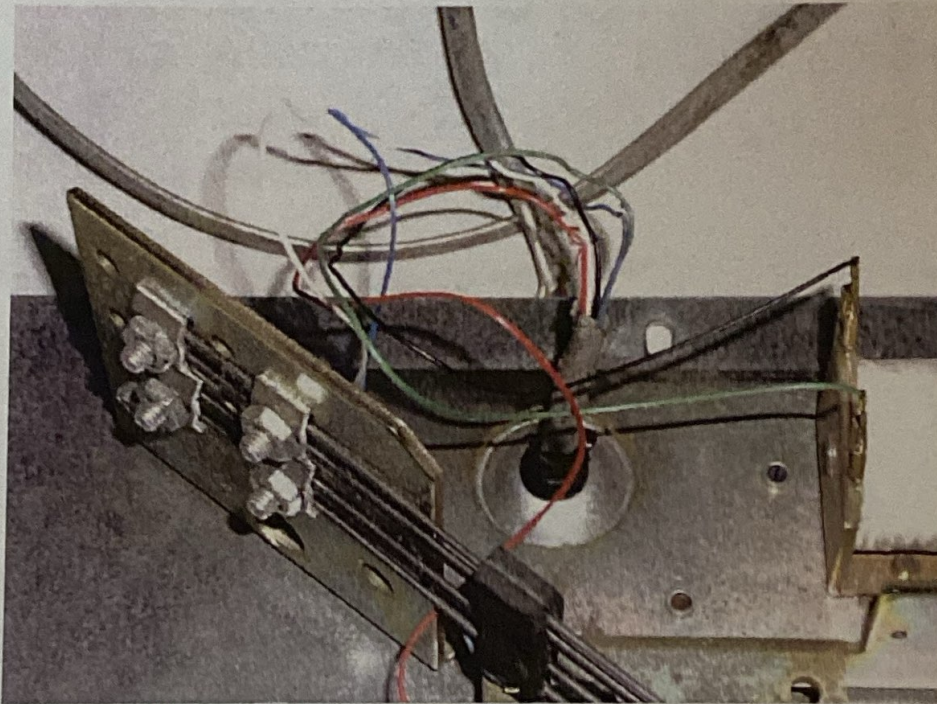
Correct: Plate and Drawer are flush.

- 3) Reattach the nuts with the nut driver.

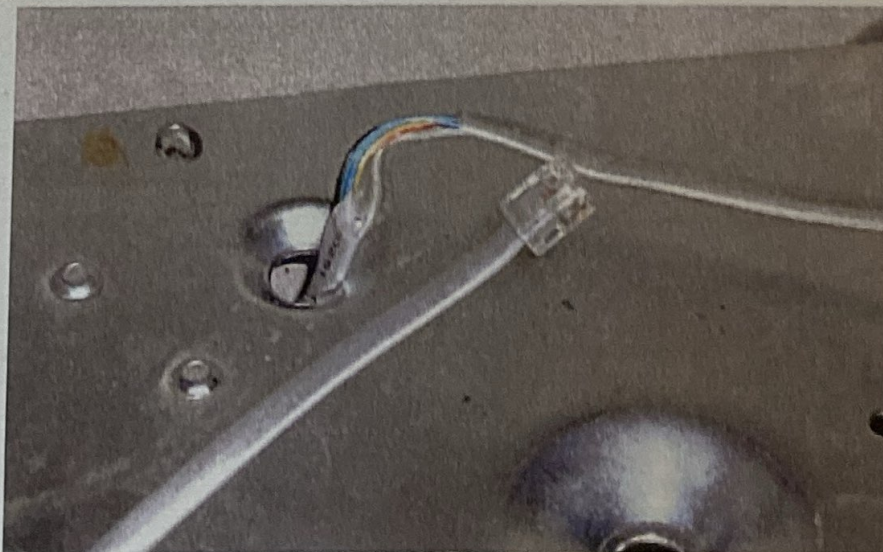
CASH DRAWER WIRING

Wiring is integral to a working cash drawer. Bad wiring can cause your drawer to intermittently work, or not even work at all.

Examples of wiring problems:

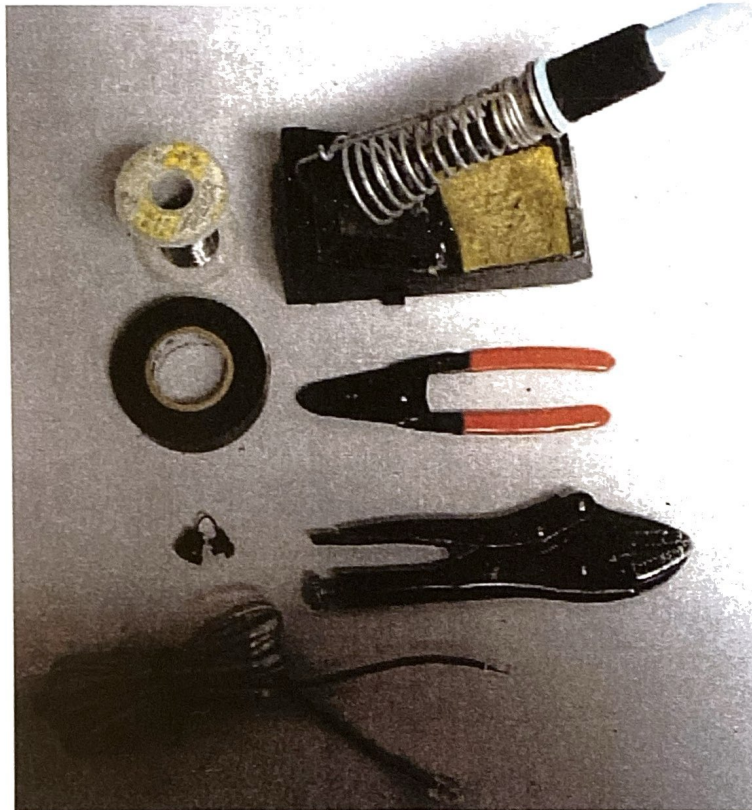


*Wiring is not wrapped properly and is hanging loose.



*Wiring is exposed and clip is broken on the connector.

Tools / Parts Needed:

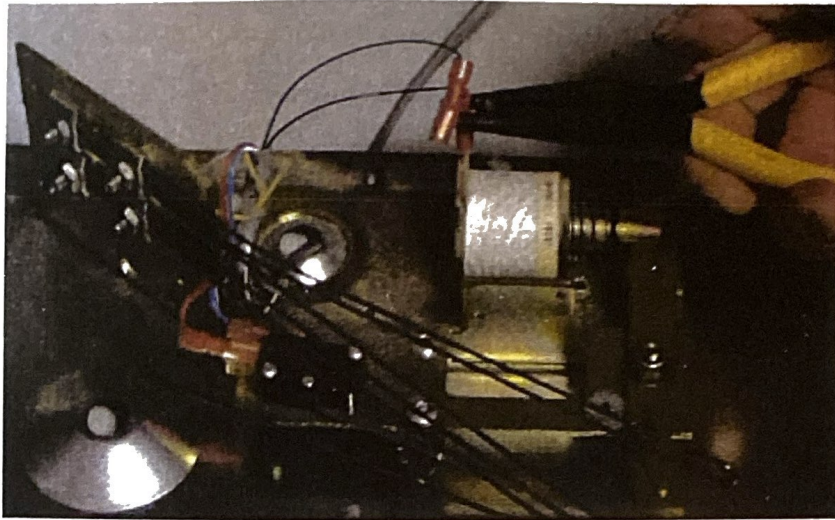


***RJ11 cable can be purchased from Radio Shack or another electronics store. The strain relief bushing can be ordered from the POS Department through the [POS Support link \(Page 45\)](#).**

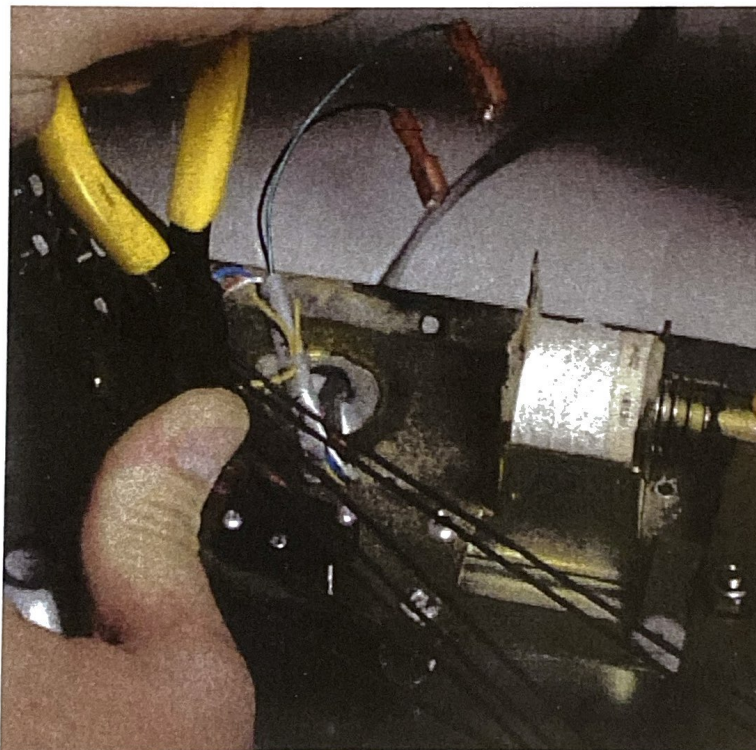
- 1) Soldering iron and solder
- 2) Electrical tape (Recommend 3M Scotch Super 33+)
- 3) RJ11 cable
- 4) Strain relief bushing
- 5) Wire cutter
- 6) Vise grips

Installation:

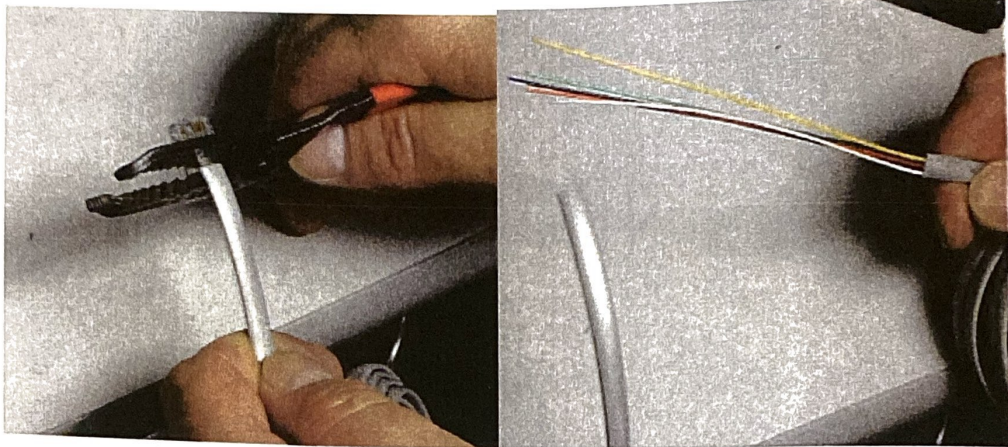
- 1) Remove the wires from the solenoid with your needlenose pliers..



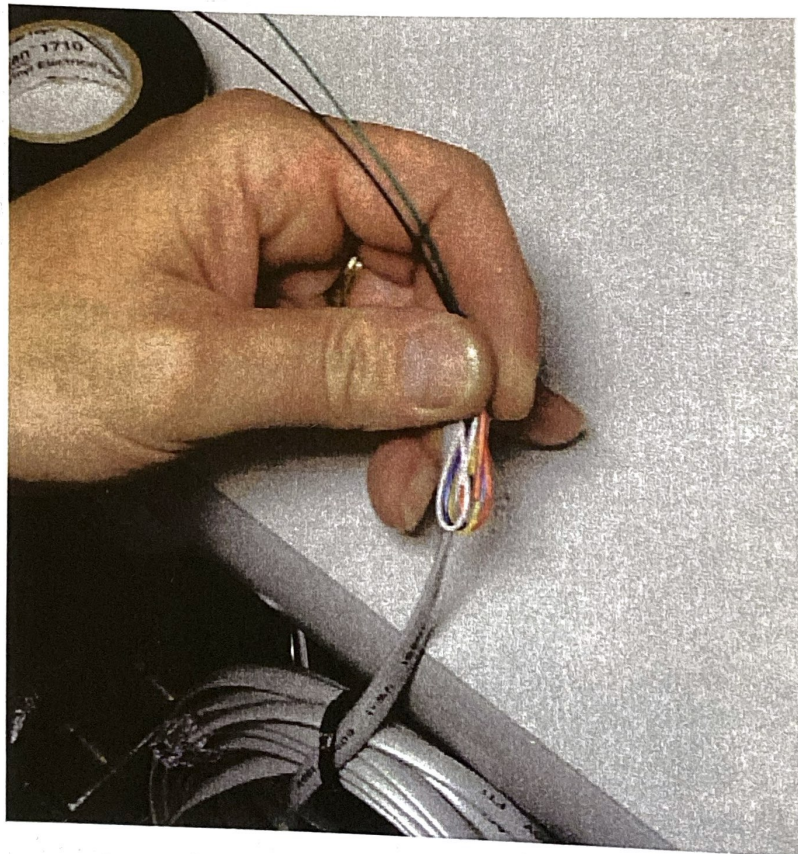
- 2) Remove the wires from the drawer sensor. ****To avoid breaking the sensor, do not pull on the wire caps with the pliers. From the back push away on the base of your pliers to gently remove the wire. (Pictured below). ****

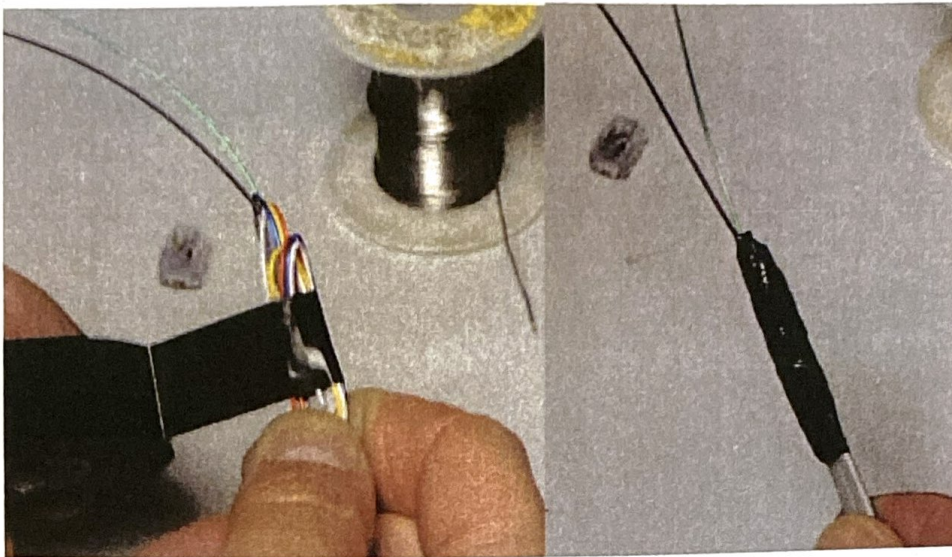


- 3) You can now string the old wiring back out.
4) Cut one end off of your new RJ11 cable and cut back the casing.



- 5) Isolate the black and green wires and loop and bind the rest with electrical tape. ****The wires that were going to the sensor are not used any longer.****

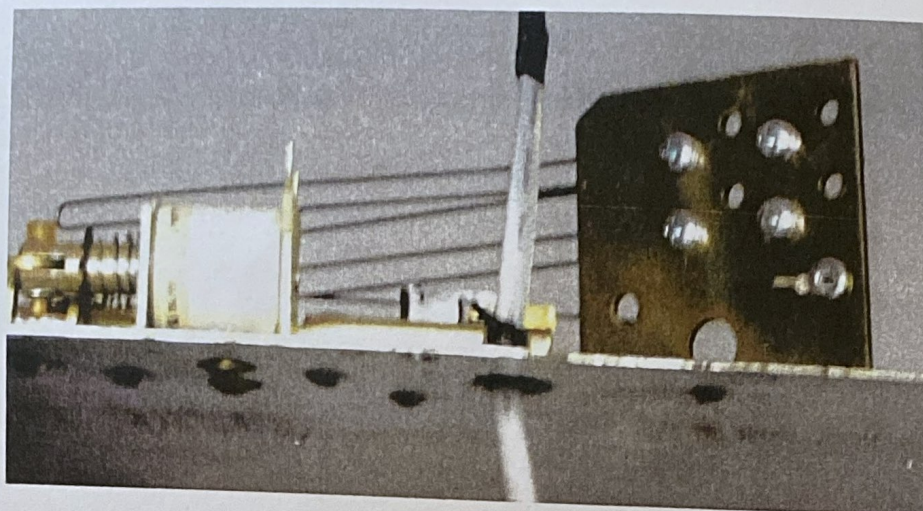




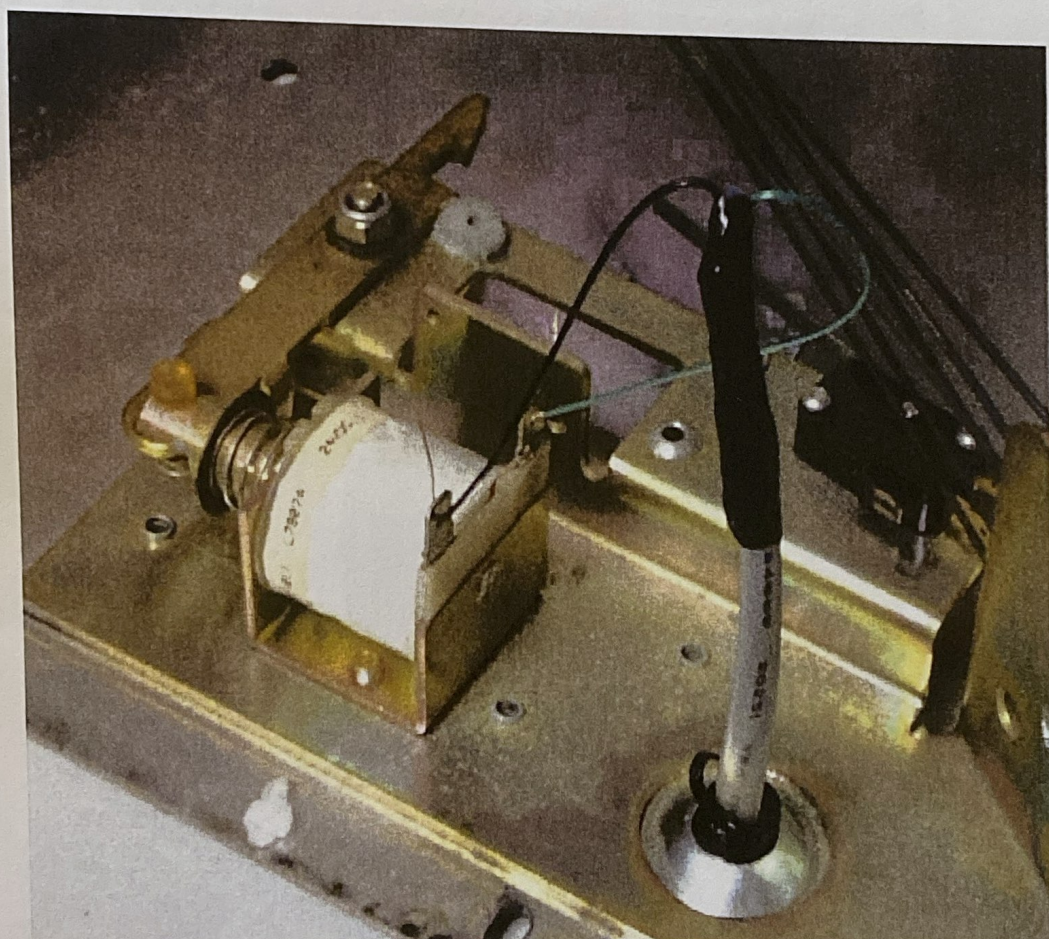
6) Clip the wire stop about 6 inches down the wire.

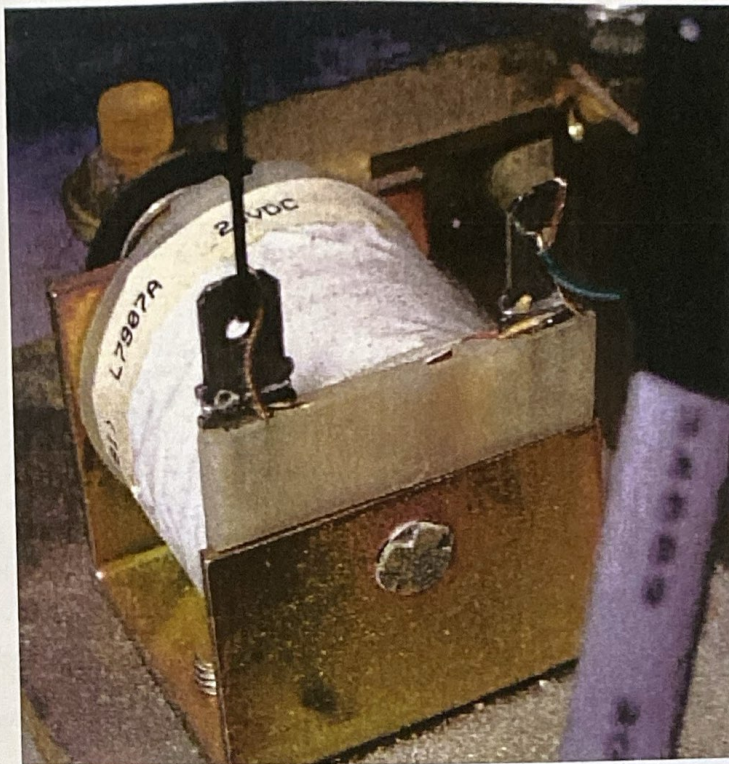


7) Feed wire up through the hole in the bottom of the drawer.



- 8) Cut back the casing on the green and black wires. Loop them through the holes on the solenoid connectors. ****The black wire goes towards the back of the register, the green towards the front. ****



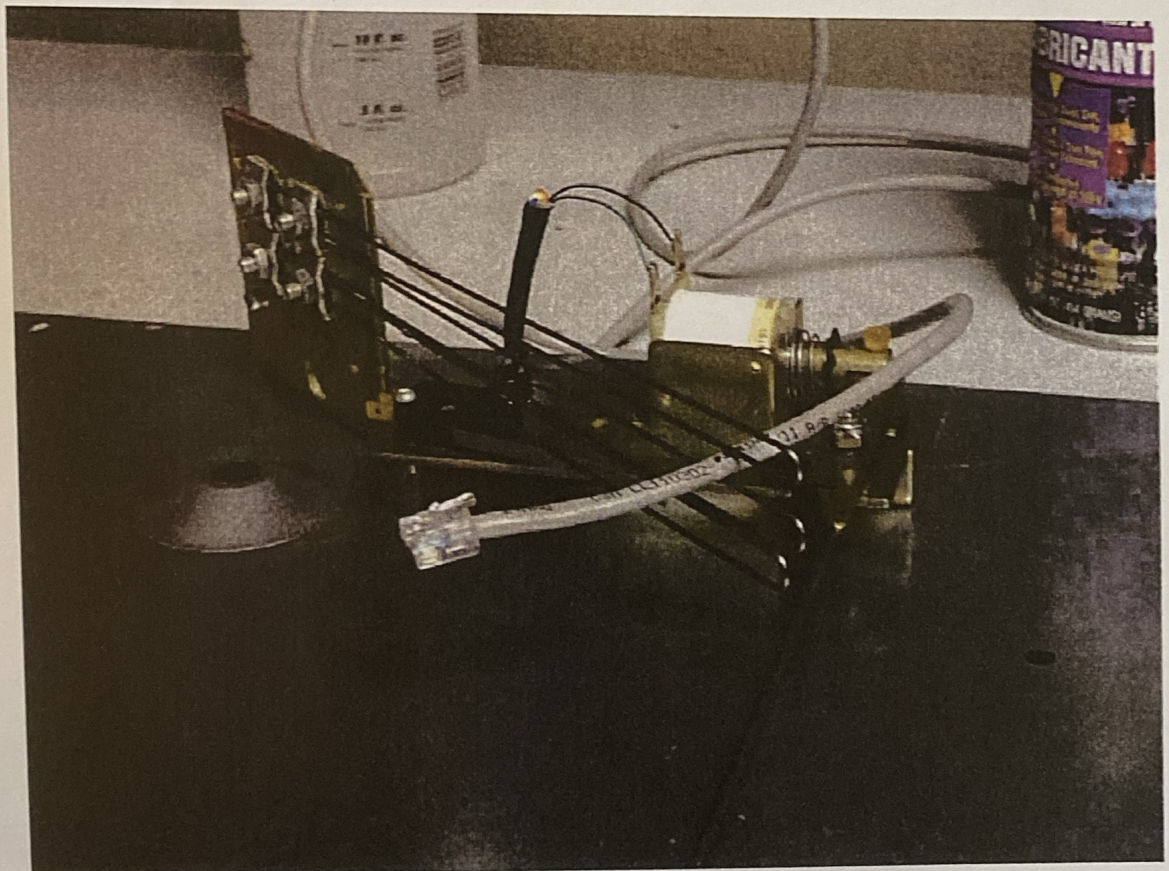


9) Lightly solder the wires in place.





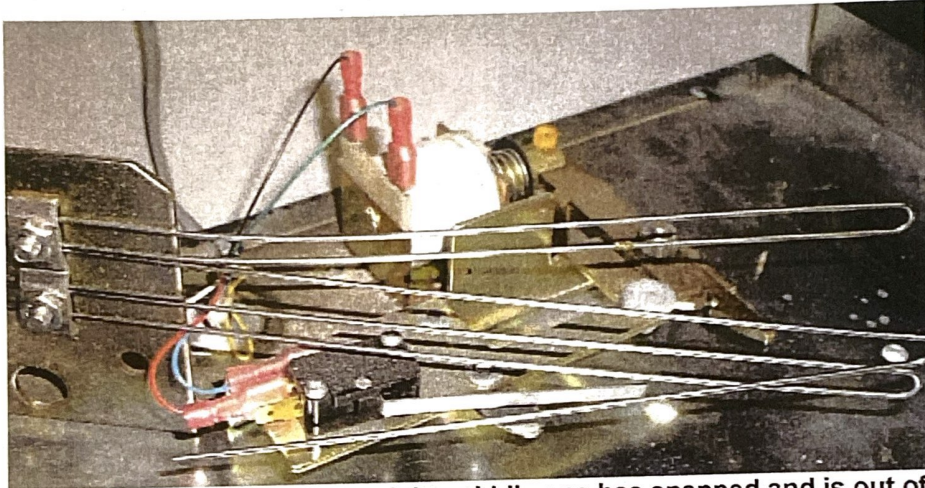
10) When finished your wires should look neat and clean as pictured below.



CASH DRAWER SPRINGS

Broken or bent springs can cause your cash drawer not to release when fired. Making sure these are in working order is important to a working cash drawer.

Example of bad springs:



*Note how the top spring is bent and the middle one has snapped and is out of place.

Tools / Parts Needed:

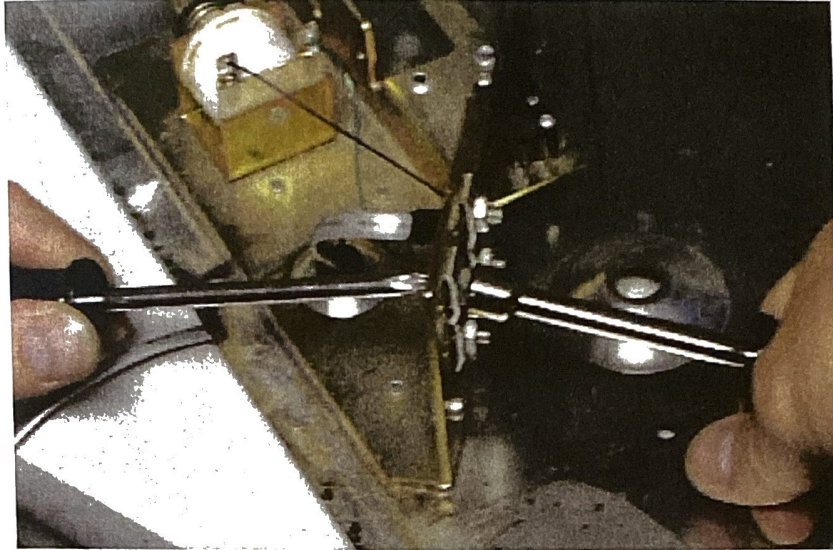


*Spring kit can be ordered from POS Department through the [POS Support link \(Page 45\)](#).

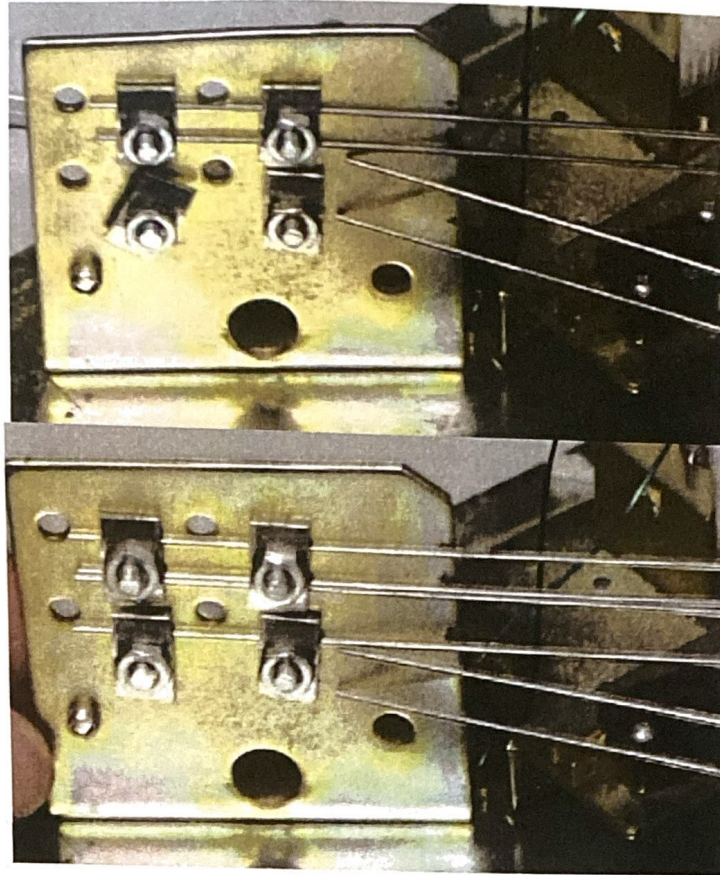
- 1) Spring kit ([Page 44](#))
- 2) Phillips head screwdriver
- 3) 5mm Nut driver (Blue)

Installation:

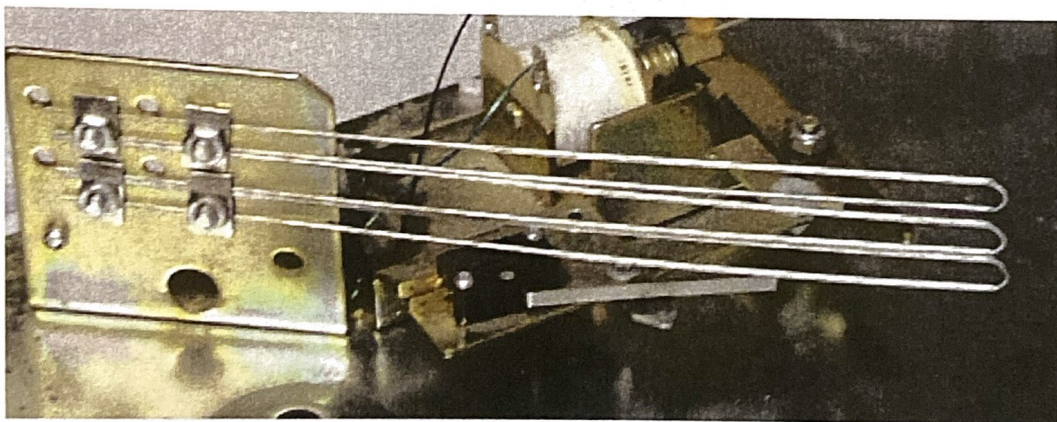
- 1) Remove the old springs. You will need a Phillips head screw driver for once side and a nut driver or wrench for the other side. Hold the nut in place with the nut driver/wrench and loosen the screw from the other side.



- 2) Loosen this just enough to get the springs out and put the new ones in, it will make the installation a little easier.



- 3) When you have the springs in place do not tighten them down all the way. You will find you can twist them a little to get them to line up all in place. Once you have them all in line, tighten them down the rest of the way. The finished product should look like the picture below.



CASH DRAWER RAILS & BEARINGS

Having clean rails and bearing packs is an important part of a functioning cash drawer. Missing bearings or the use of grease on the rails and bearing packs can cause the drawer not slide when fired.

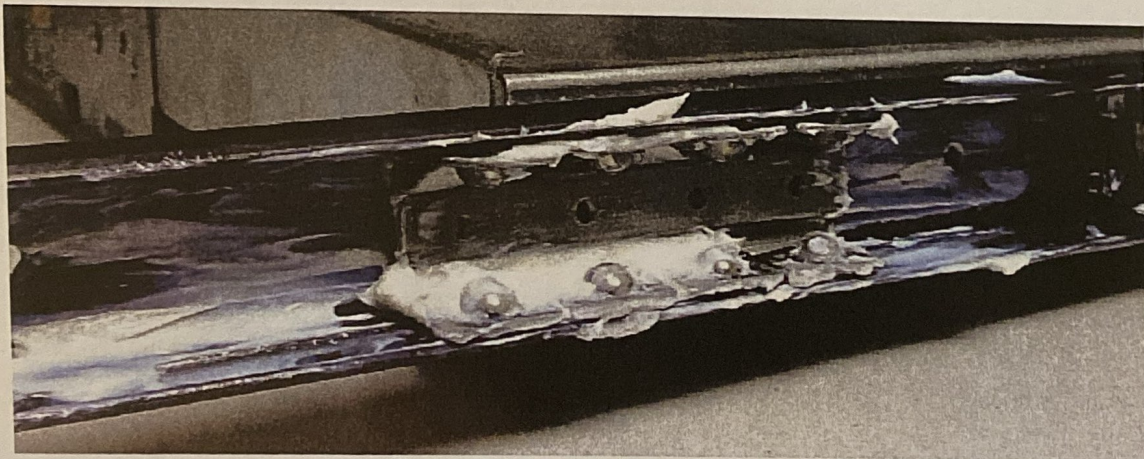
Examples of rail / bearing problems:



Missing and loose bearings

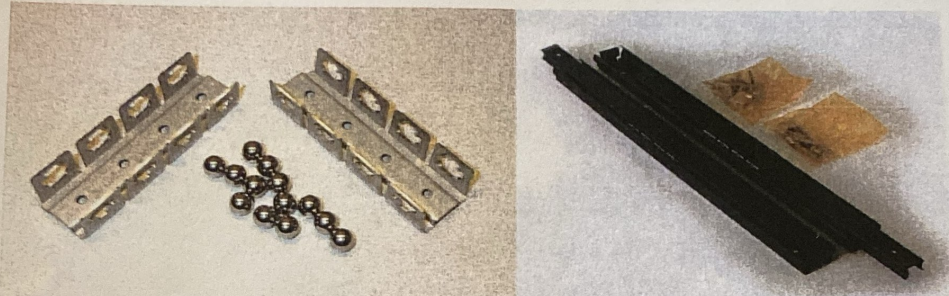


Grease on the rails

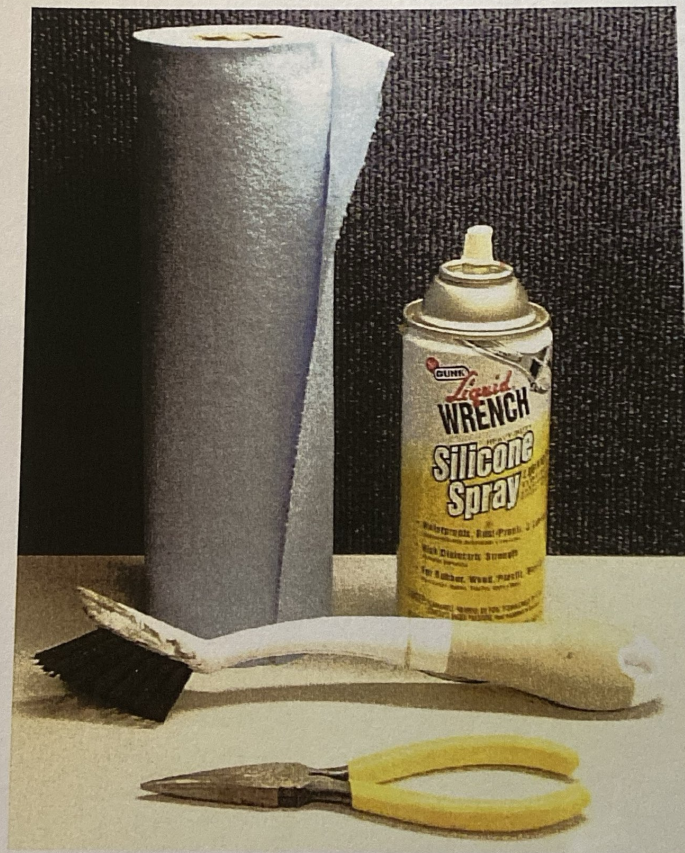


Grease used on rails and bearing packs

Tools / Parts Needed:



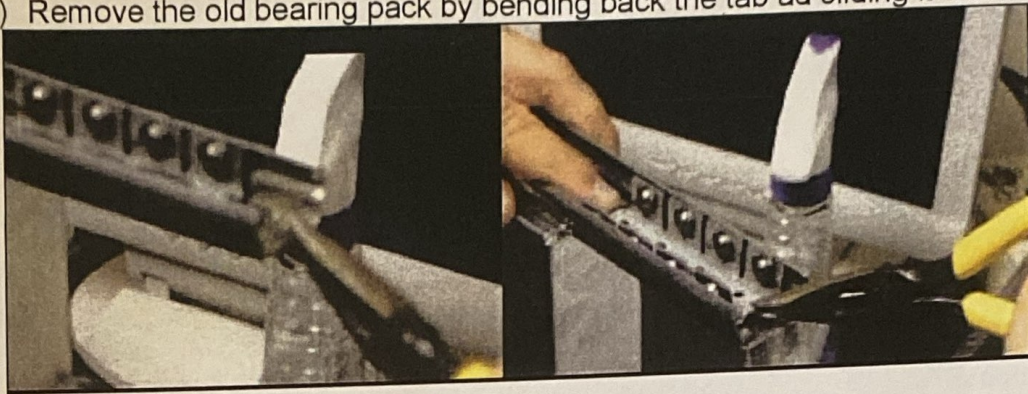
*Ball Bearing Kits or Rail kits can be ordered from POS Department through the [POS Support link \(Page 45\)](#), if you are missing any bearings or the retainers cannot be repaired



- 1) Silicone Spray
- 2) Brush
- 3) Shop Towels
- 4) Vise grips
- 5) Ball Bearing Kit ([Page 44](#))
- 6) Rail Kit ([Page 44](#))

Installation:

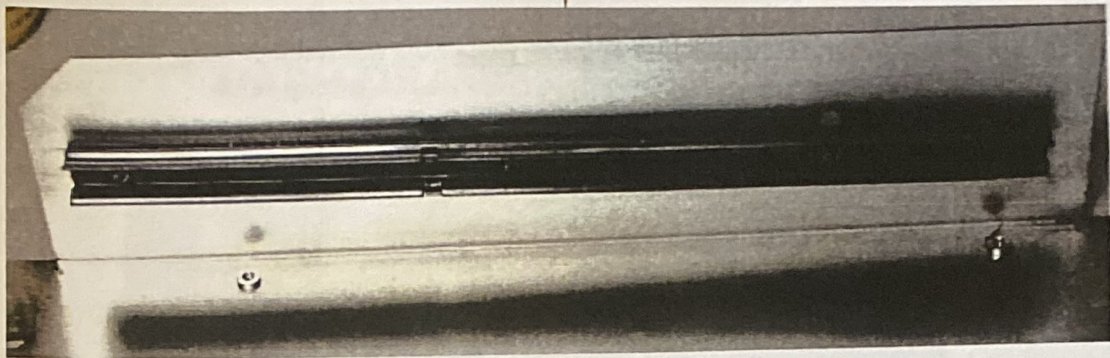
- 1) Remove the old bearing pack by bending back the tab and sliding it out.



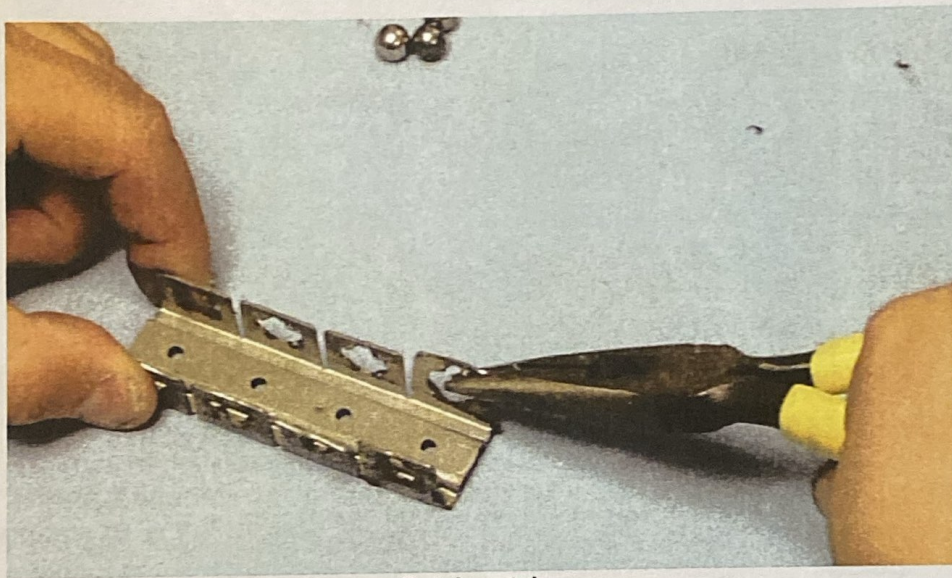
- 2) Once you have the bearings removed clean the rails. Use a shop towel to clean any grease from the rail. You can use Silicon Spray not only as a lubricant, but it also works as a good cleaner on the rails. Tilt the rail up and down to clean behind it as well.



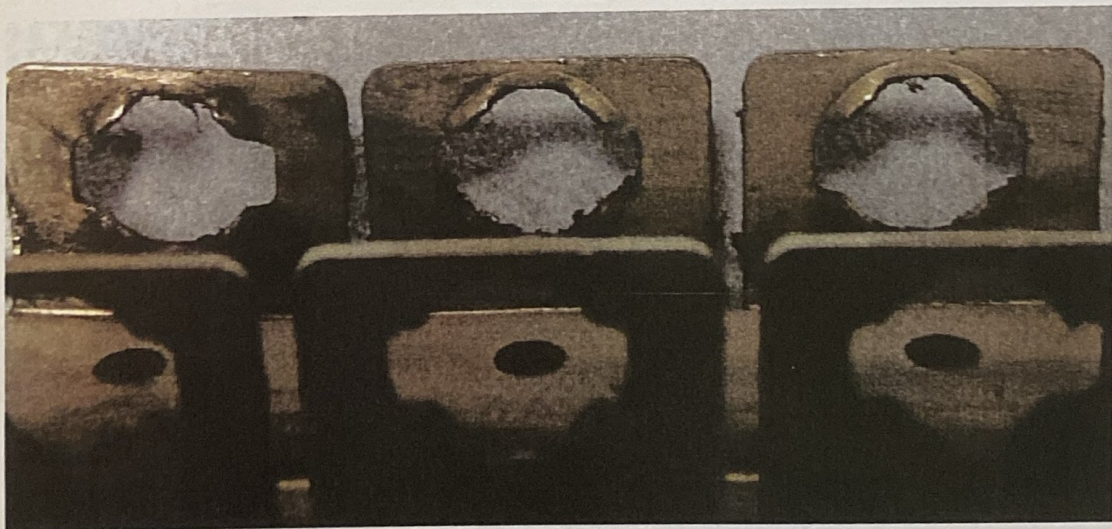
- 3) After cleaning spray a light amount of Silicon Spray on the track and behind the rail. It should look like the picture below when done.



- 4) If the sides of your retainer tabs are not straight or the ball bearing retainer cups have bent tabs, bend them back into place.

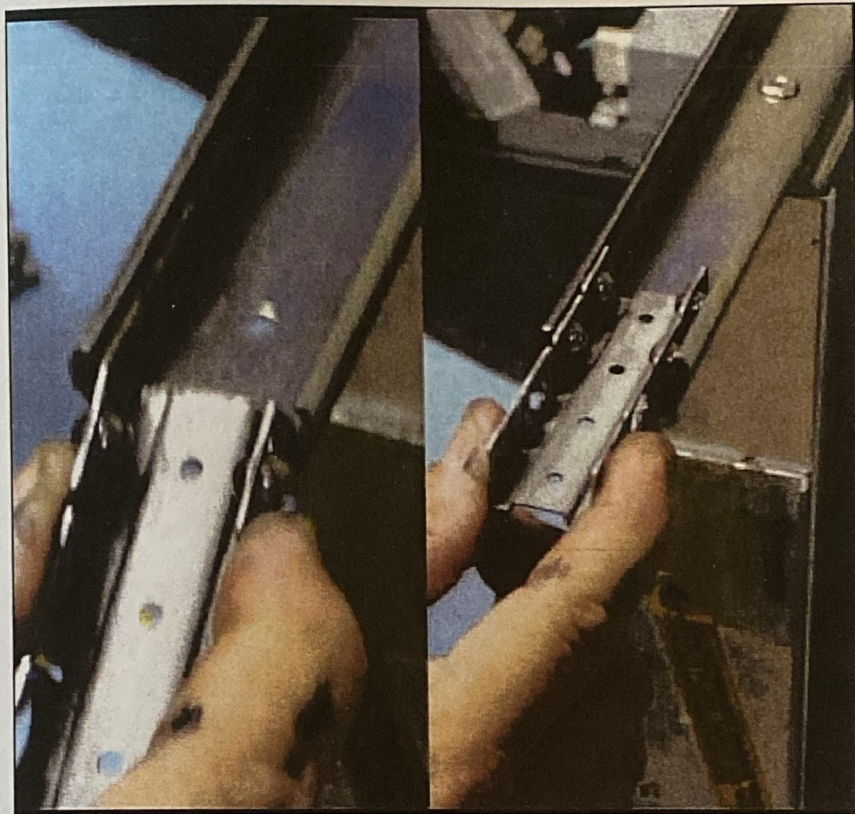


Retainer tabs

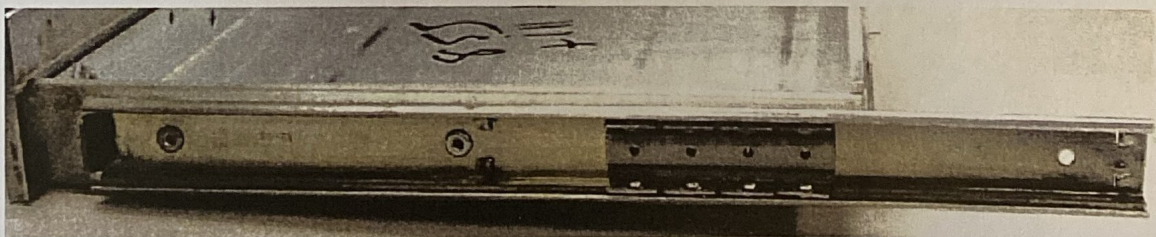


Bearing retainer cups

- 5) Insert the bearing pack back into the rail. You will want to hold two bearings in place and slide the rail in two bearings at a time.

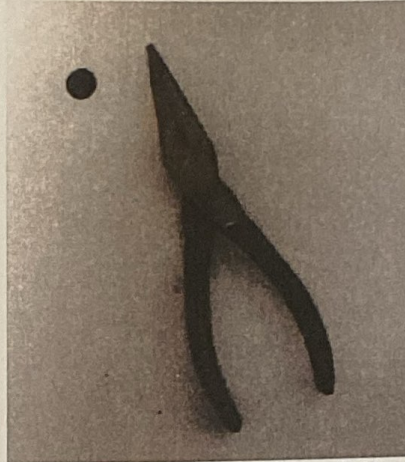


- 6) Spray the bearing pack with some silicone spray and move it back and forth along the track to lubricate. Finished product looks as pictured below.



CASH DRAWER BUMPER STOP

Tools / Parts Needed:

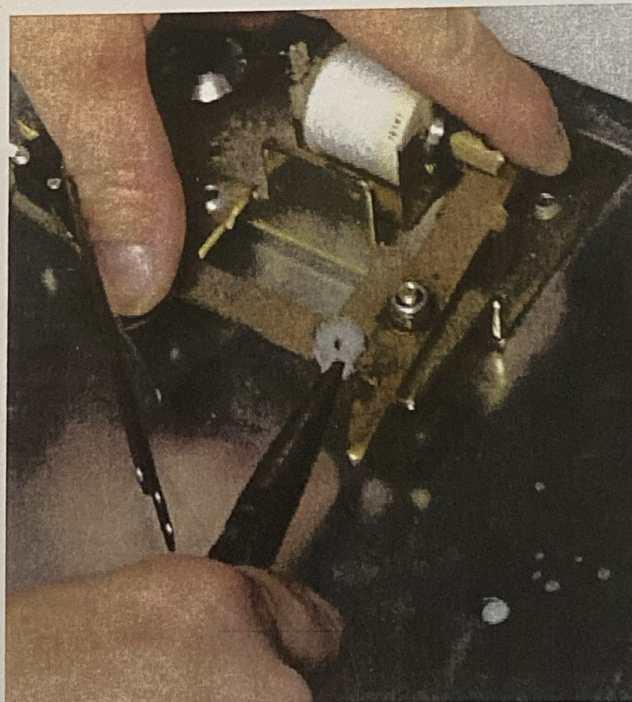


*Stopper can be ordered from POS Department through the [POS Support link \(Page 45\)](#).

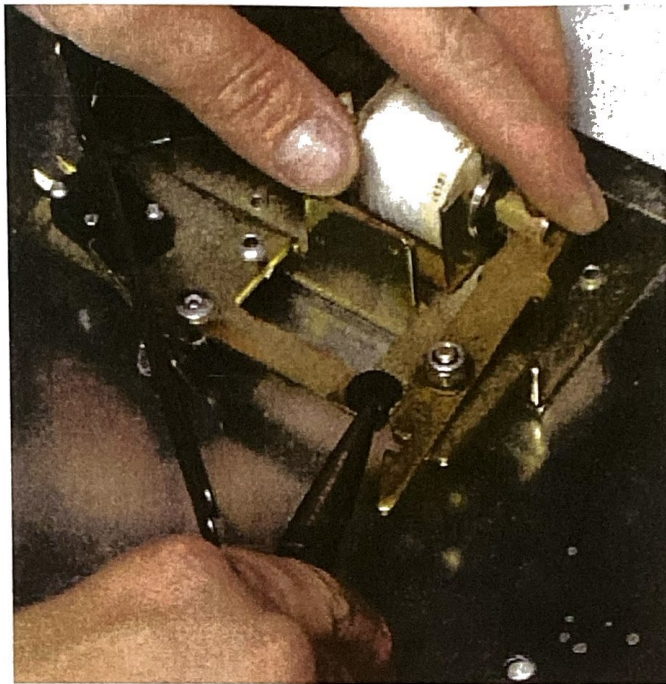
- 1) Latch Bumper Stop ([Page 44](#))
- 2) Needlenose pliers

Installing new stopper:

- 1) Remove the old stopper with your pliers.



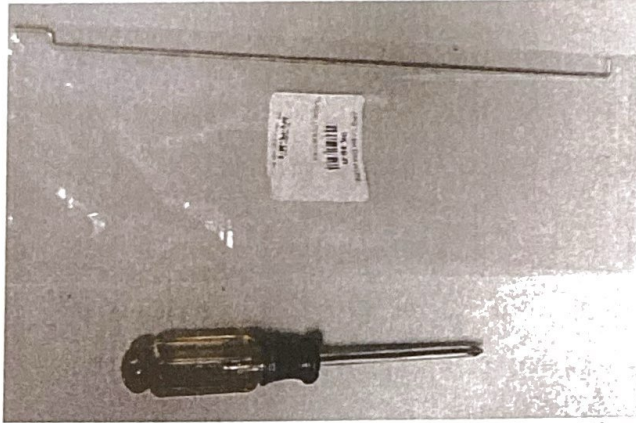
2) Install the new stopper.



CASH DRAWER LOCK BAR

A missing lock bar will do things.

Tools / Parts Needed:



*Lock bars can be ordered from the POS Department through the [POS Support link \(Page 45\)](#).

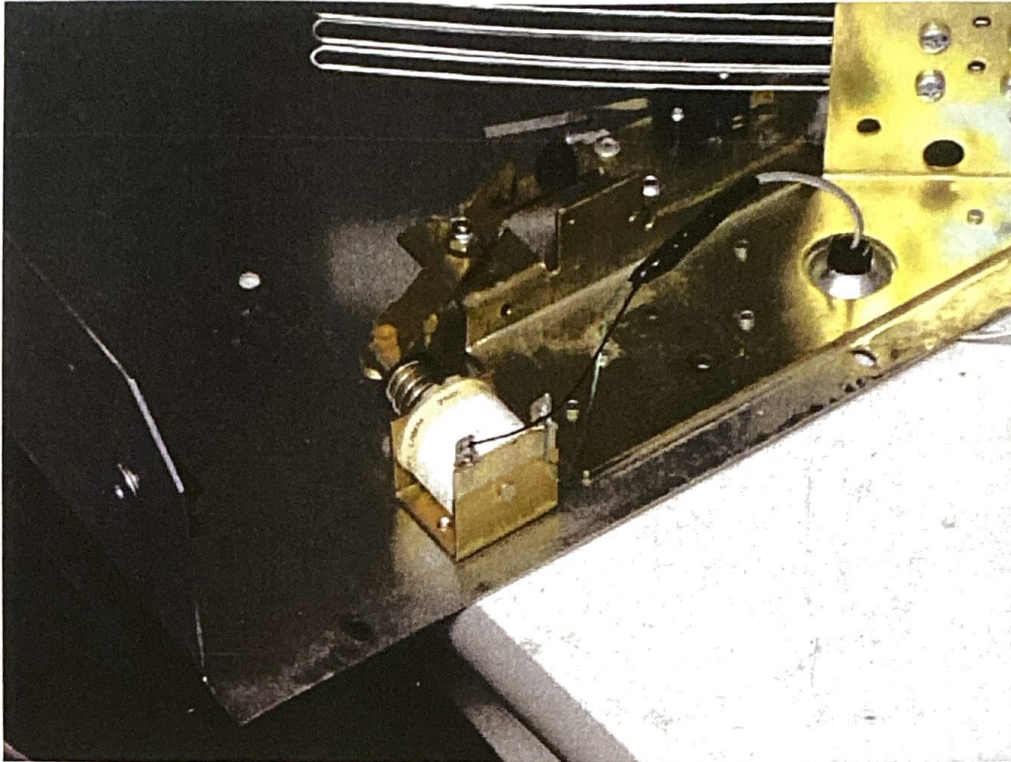
- 1) Lock bar ([Page 44](#))
- 2) Phillips head screwdriver

Installation:

- 1) Remove the screws holding the solenoid in place. Move the solenoid off of the plate to the side. You will need this out of the way to feed the lock bar through.

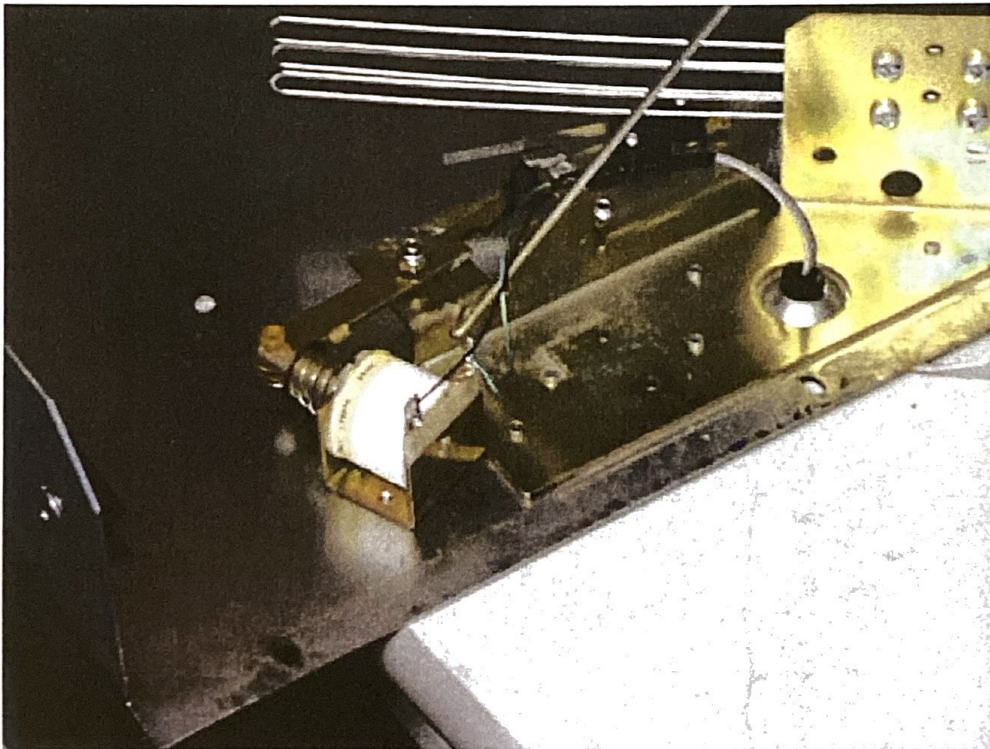


Removing screws from the bottom

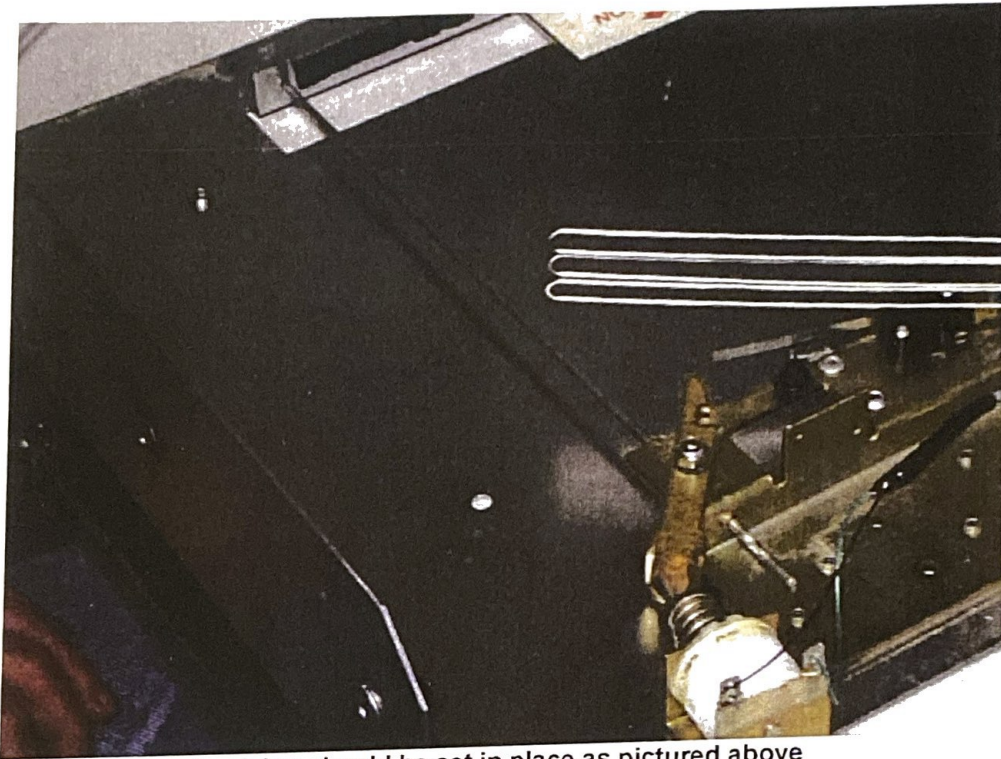


Solenoid moved to the side

2) Slide the new lock bar through the hole.

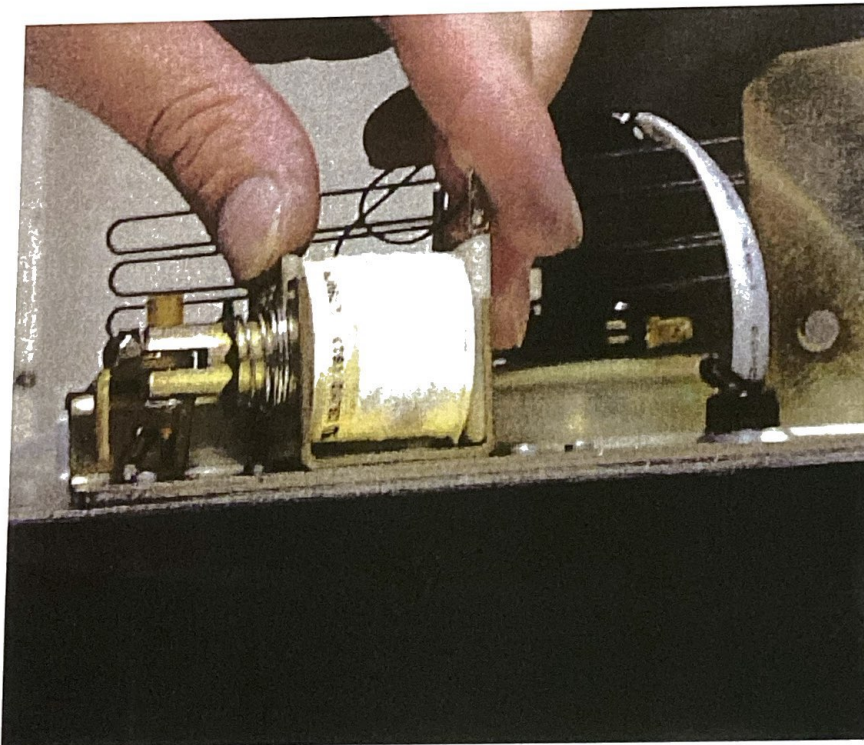


Insert "L" shaped end through the hole

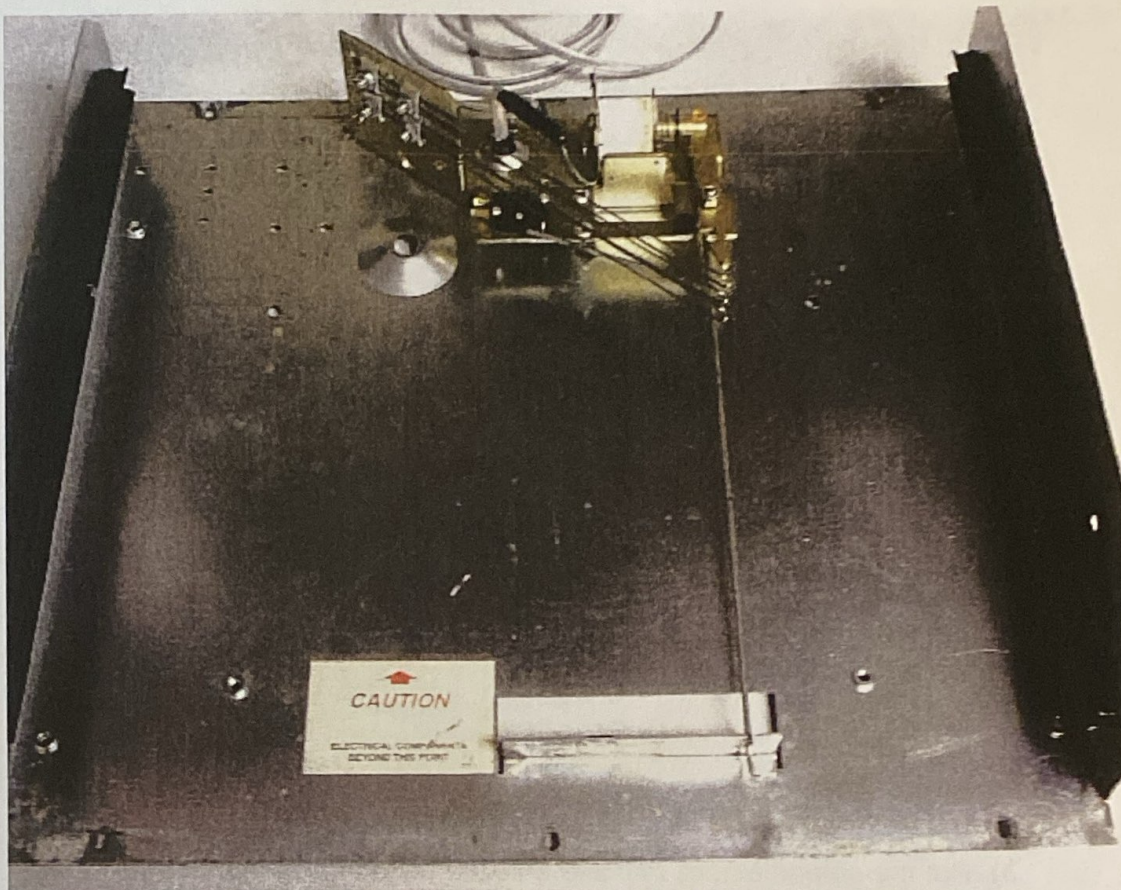


Lock bar should be set in place as pictured above

- 3) Put the solenoid back in place and put the screws back in.



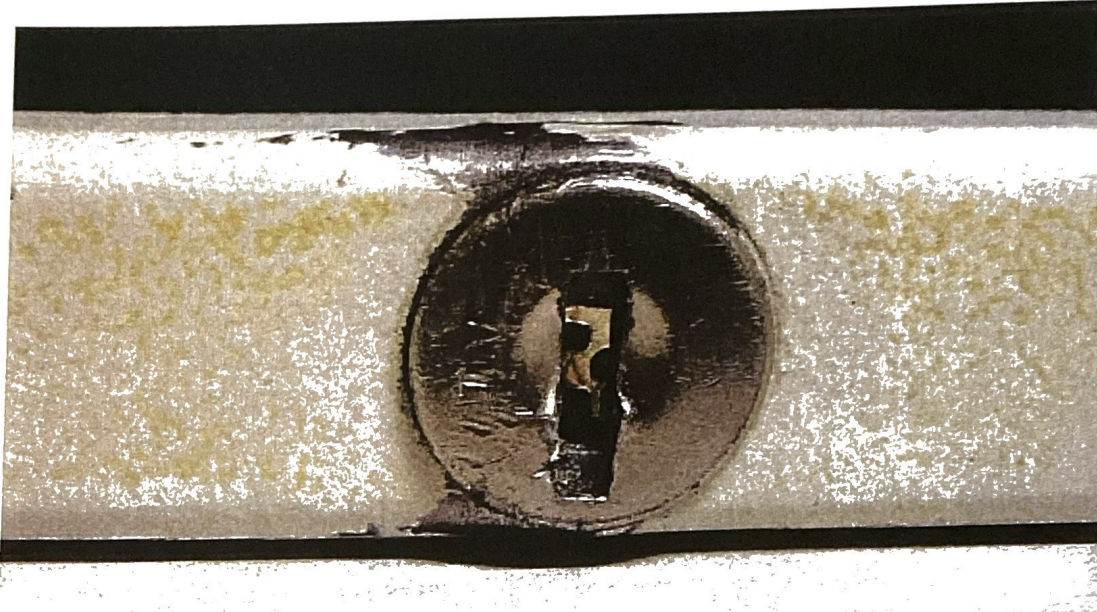
Hold solenoid in place inserting screws from underneath



Completed installation of lock bar

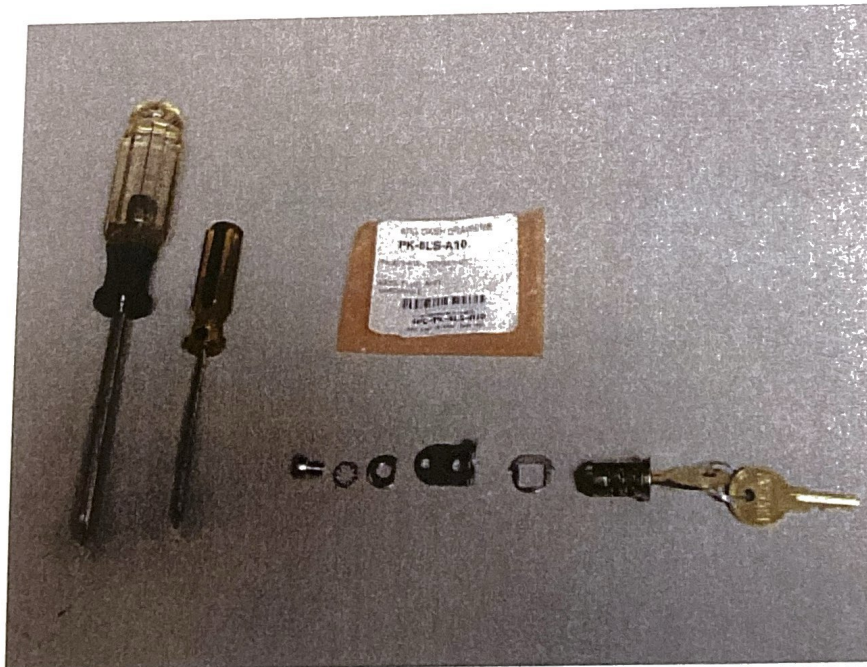
CASH DRAWER LOCK

Example of problem:



Key broken off in lock

Parts / Tools Needed:

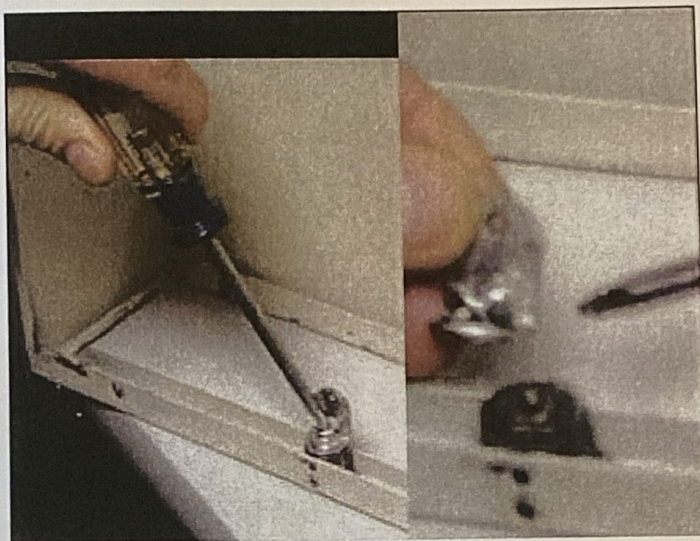


If you need a replacement lock or keys, you can order these from the POS Department through the [POS Support link \(Page 45\)](#).

- 1) Lock kit (if needed) (Page 44)
- 2) Small and large Phillips head screwdriver

Installation:

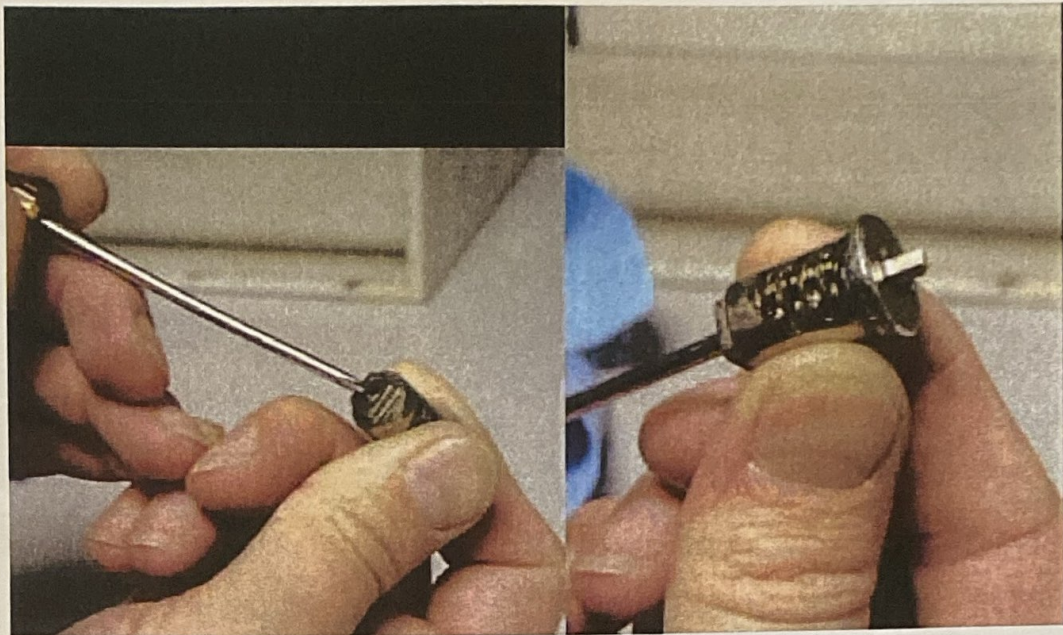
- 1) Take the screw out and remove the washers and lock bar catch.



- 2) Push the lock out.



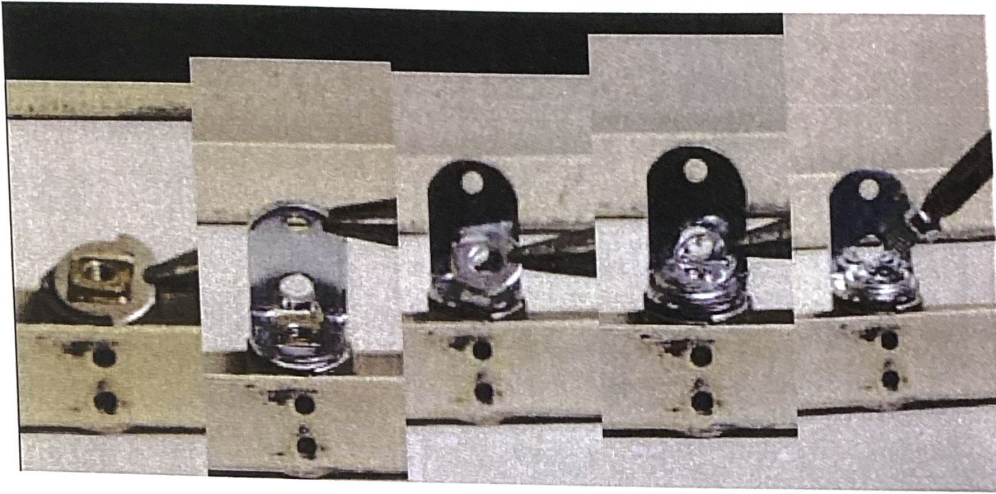
- 3) If you are removing a broken key from the lock use a small screw driver to push it back out of the lock barrel from the back of the lock.



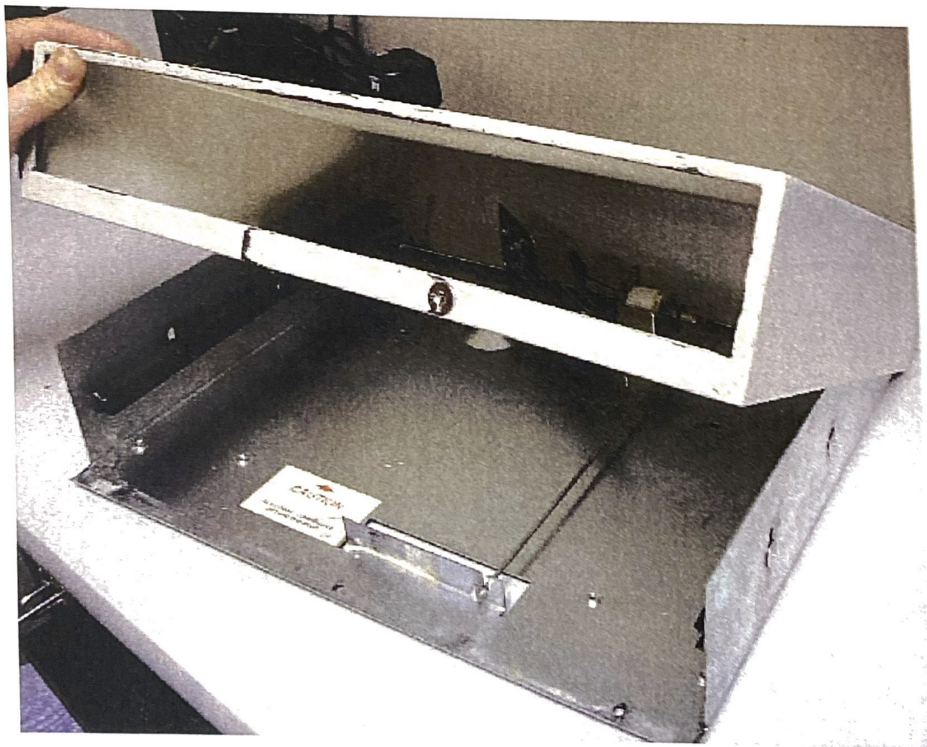
- 4) Insert the new or repaired lock.

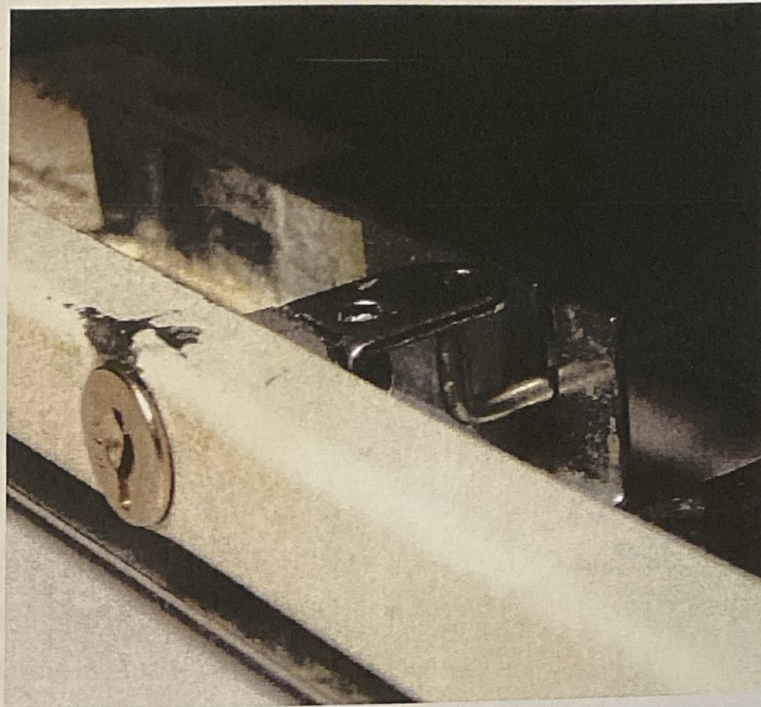


- 5) Put the lock bar catch and washers back on.



- 6) Set the case down into place, settling the catch for the lock bar into place.



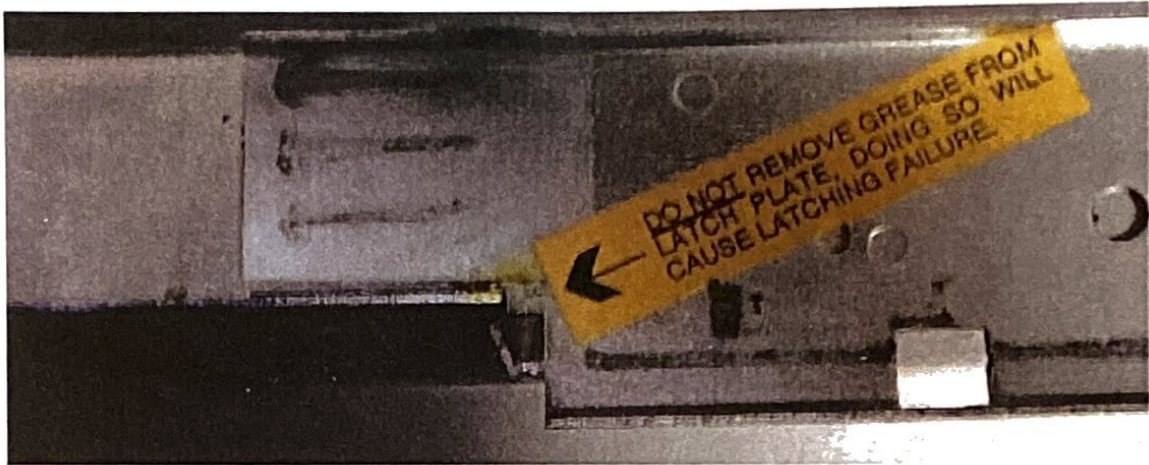


7) Install complete.

CASH DRAWER LATCH PLATE

If your cash drawer latch plate has broken it will cause the drawer not to be able to be closed.

Example of broken part:



If your latch plate is broken, order a replacement from the POS Department using the POS Support link (Page 45).

Installation:

As this is a whole inner drawer you will just replace the whole part.

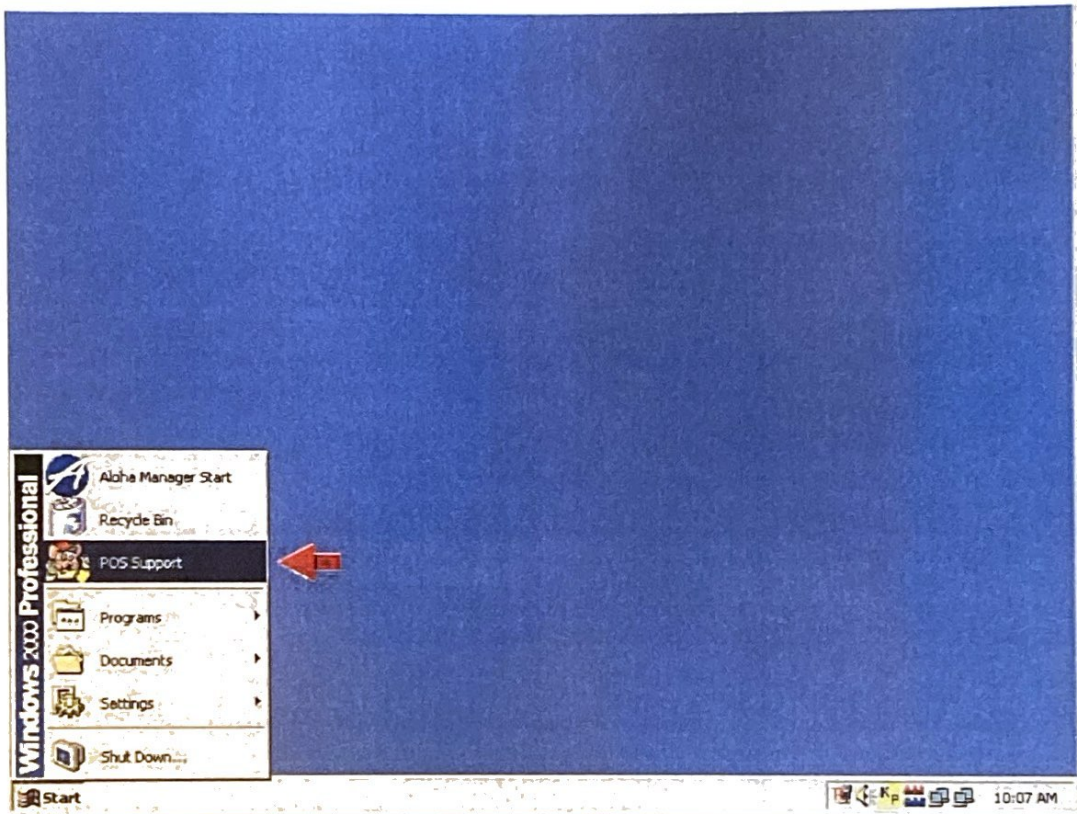
APG CASH DRAWER PART LIST

 <p>PK-4BB Ball Bearing Kit: (2) ball bearing retainers and (16) ball bearings</p>	 <p>PK-6 Wand Spring Kit; (3) wand springs, (4) screws, (4) nuts & (4) spring clips</p>	 <p>PK-4A-BL (2) Drawer Slides & (12) attachment rivets</p>
 <p>PK-8LS-Axx Tumbler Assembly; lock, cam, stop, screw, (2) washers, retaining clip & 2 keys.</p>	 <p>PK-8K-Axx Keys; set of (2) keys.</p>	 <p>PK-7 Latch Assembly; latch, nut, (2) washers, pin, retainer & bumper</p>
 <p>PK-17-5023 Base Pad Kit; (4) 5/16" H. adhesive rubber feet</p>	 <p>PK-20 (5) Latch Rubber Bumper Stop</p>	 <p>PK-2B-2 (6) Base to case attachment screws</p>
 <p>PK-15VTA-BX Value Till Assembly 5x5 Size: 15.38 x 11.06 x 2.36 inches</p>		

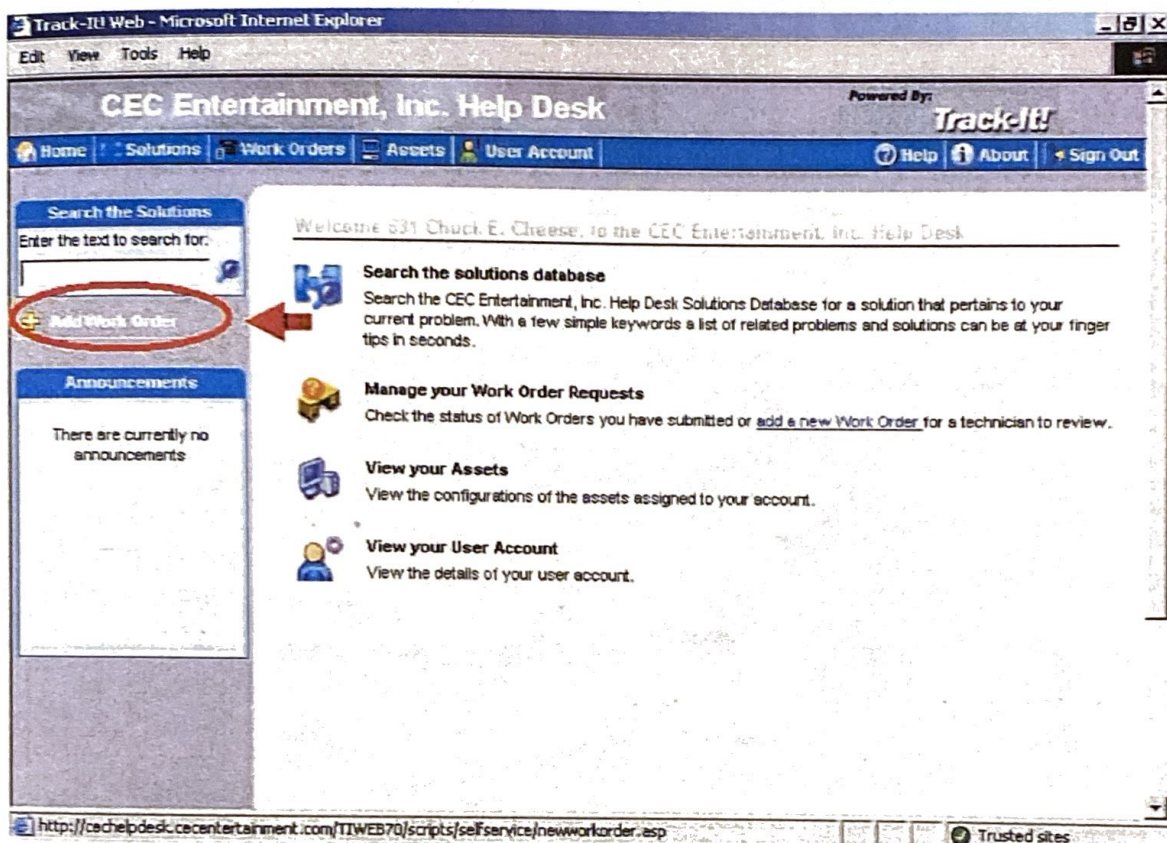
P.O.S. WEB SUPPORT

Calls for parts may be started through the POS Support link on your office computer. You can also use this link for any other POS issues you may have to start a work order, as an alternative to calling in. **(**If your issue is an emergency and the office is closed. On the weekends and after 7pm weekdays you will want to call the emergency line at (817) 870-0744.)**

- 1) From your Windows Start menu, click on the POS Support icon.



- 2) Click on Add Work Order.



- 3) From the drop down lists select the following. Type: _POS Cash Drawers. Subtype: APG Cash drawers. Category: Needs Part. Add your summary, and description of the part you would like, and then click submit. This will put your work order in queue for a POS Representative to work on. You may then click Sign Out and close the program.

Track-It! Web - Microsoft Internet Explorer

Edit View Tools Help

CEC Entertainment, Inc. Help Desk Powered By: **Track-It!**

Home Solutions **Work Orders** Assets User Account Help About Sign Out

Search the Solutions

Enter the text to search for:

Add Work Order

Announcements

There are currently no announcements

Work Order (460085)

Fill this form out as completely as possible. When you submit this Work Order you will receive a confirmation number.
[Back to Your Work Orders](#)

Summary (*)

Call-back number: (*)

Priority: (*)
3 - Medium

Type: (*) Subtype: Category:

_POS Cash Drawers APG Cash Drawer Needs Part

Description: (*)

Attachment:

(*) Denotes a required field.

[Back to Your Work Orders](#)

Done Trusted sites

4) At anytime you can go back into the POS Support link and choose Manage your Work Orders to see any notes the POS department has added. You will also get an email with any updates as well.

REPLACEMENT GUIDE FOR BACKLIGHT ON IBM SUREPOS 4840 REGISTER



If you have received a replacement bulb from the POS Department for your IBM SurePOS 4840 register, please follow these steps for replacement.

TOOLS NEEDED

Replacement backlight, two Phillips head screwdrivers (one medium, one small.), small flathead screwdriver, needle nose pliers, razor or box cutter, electrical tape.



INSTALLATION

- 1) Tilt the screen as far back as it will go. Then place the register on its back and remove the screws from the touch screen as shown in Figure 1.

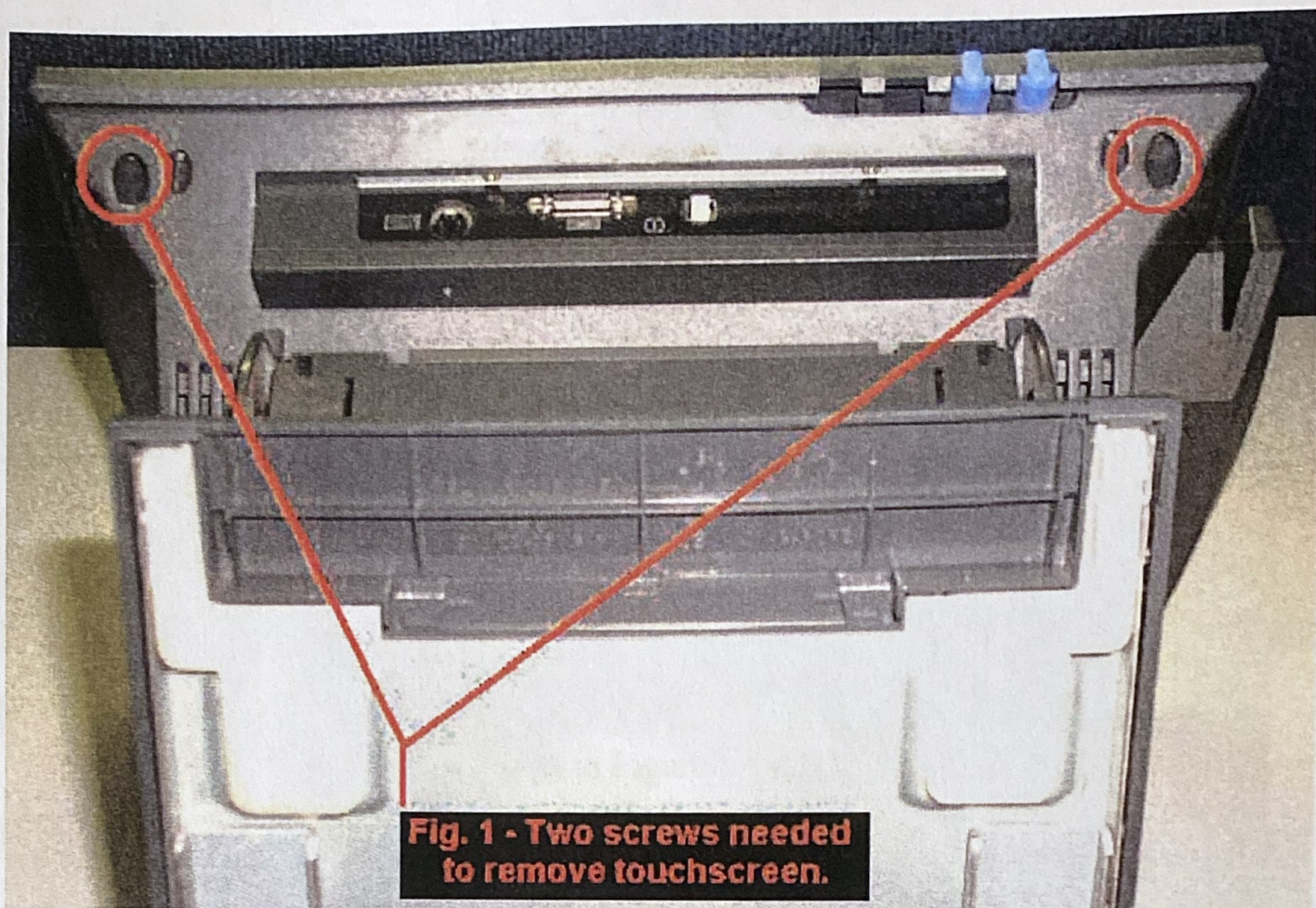


Fig. 1 - Two screws needed to remove touchscreen.

- 2) Stand the register back on its base. Lift the touch screen up and off. You will then need to disconnect the touch screen cable by pressing on the release tab for the clip as shown in Figure 2.

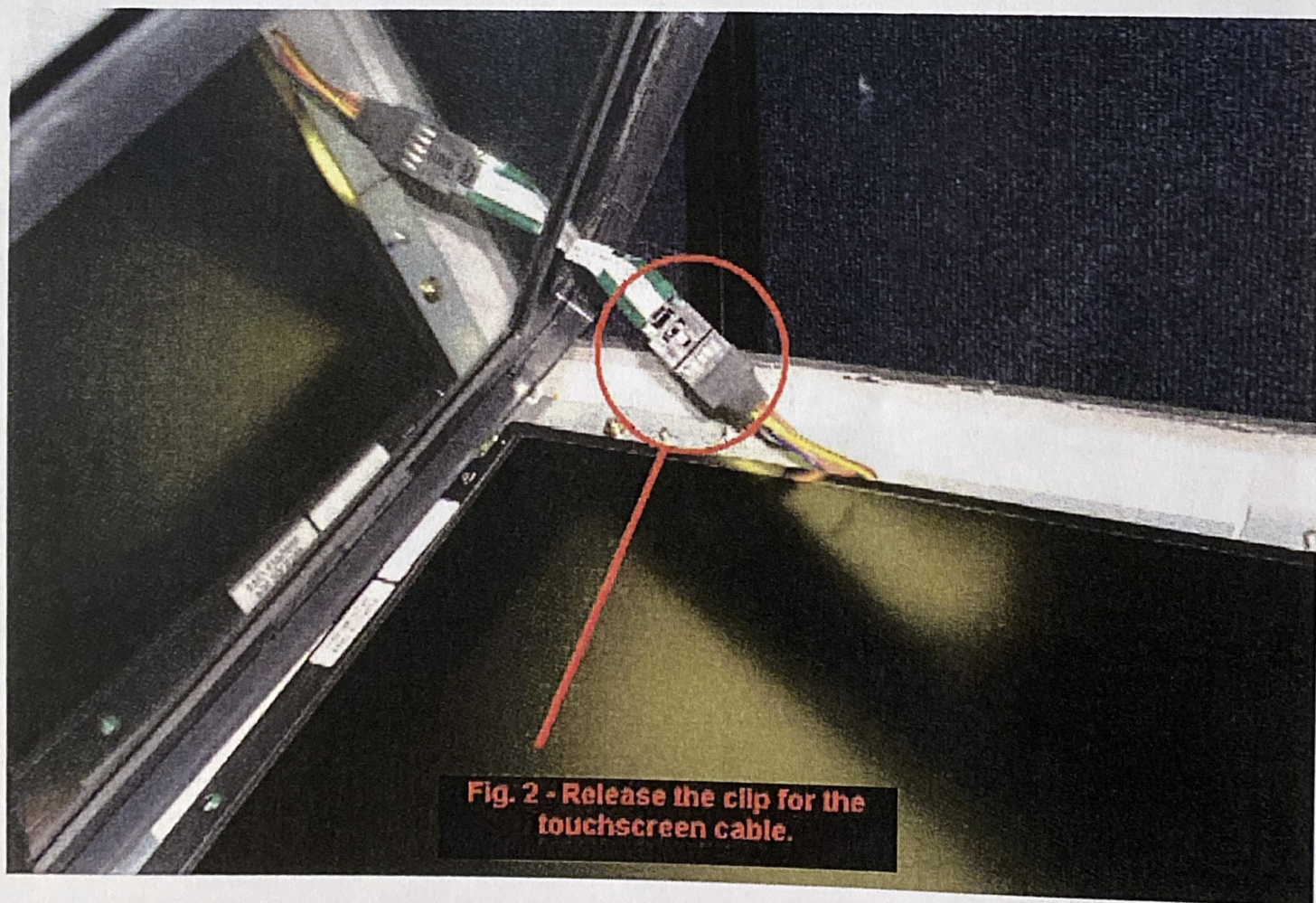
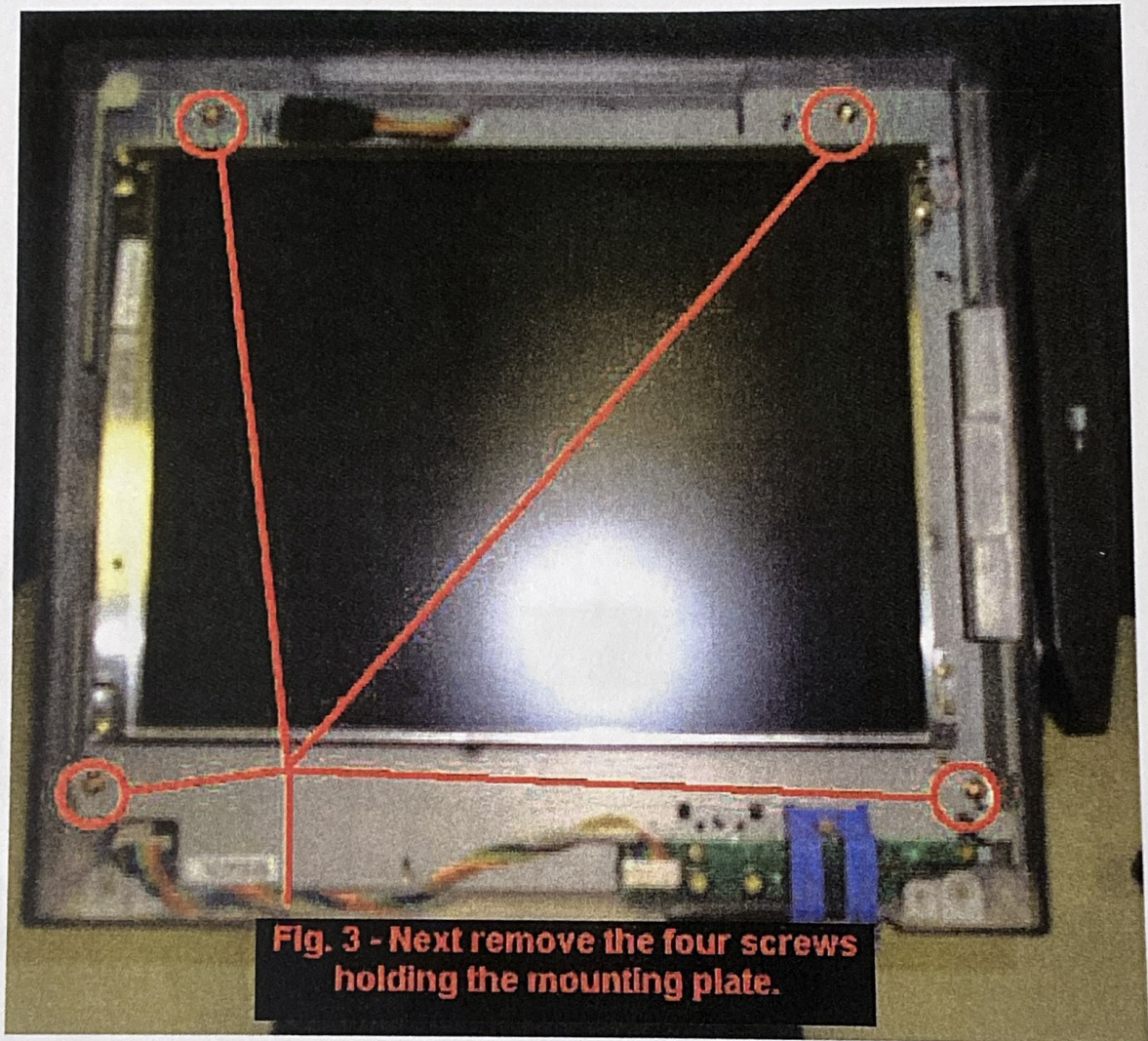
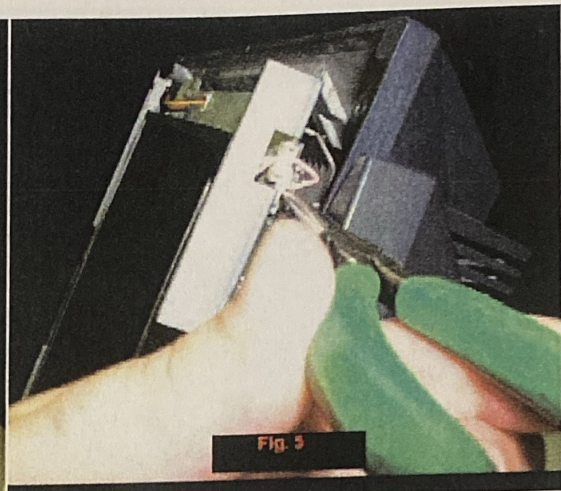
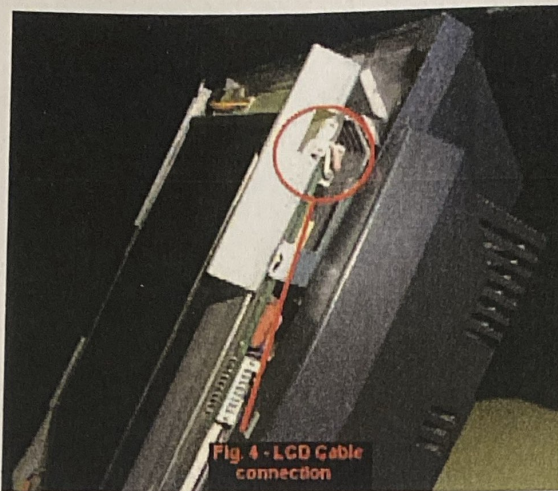


Fig. 2 - Release the clip for the touchscreen cable.

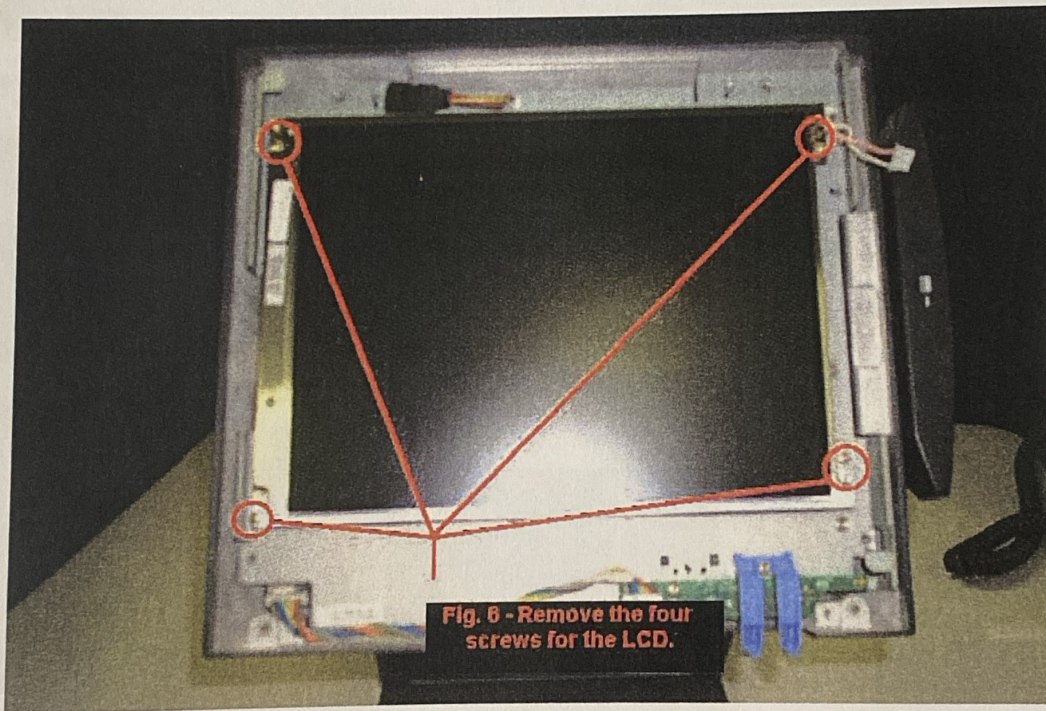
- 3) Next you will need to remove the four screws from the mounting plate as shown in Figure 3.



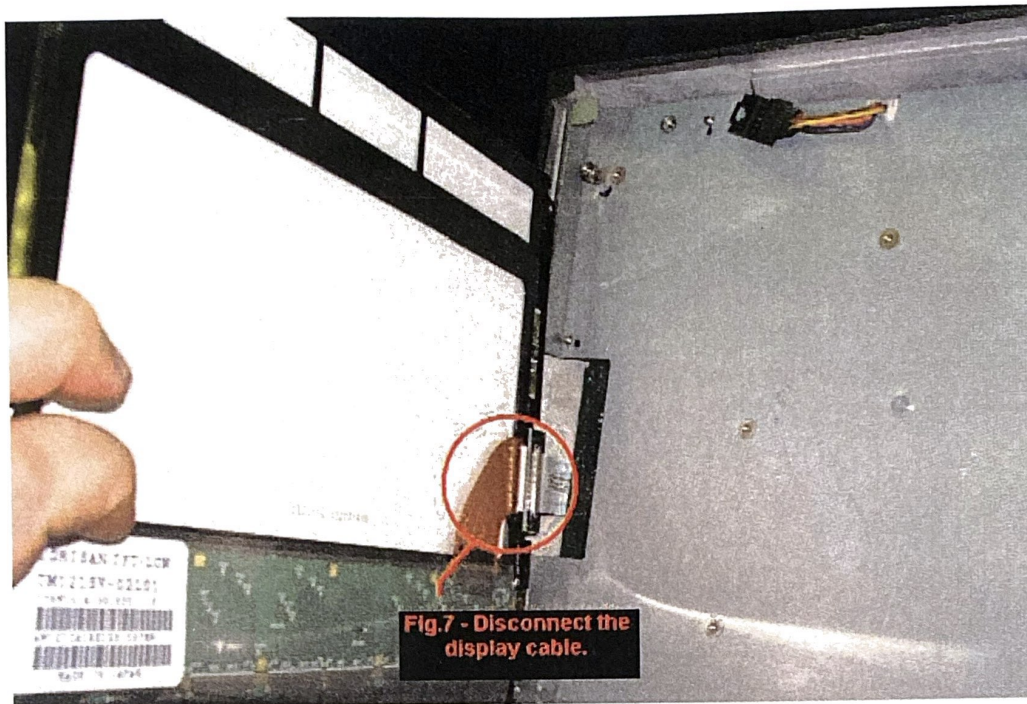
- 4) Pull forward on the mounting plate until you have enough clearance to disconnect the power cable for the LCD backlight with your needle nose pliers as shown in Figures 4 & 5.



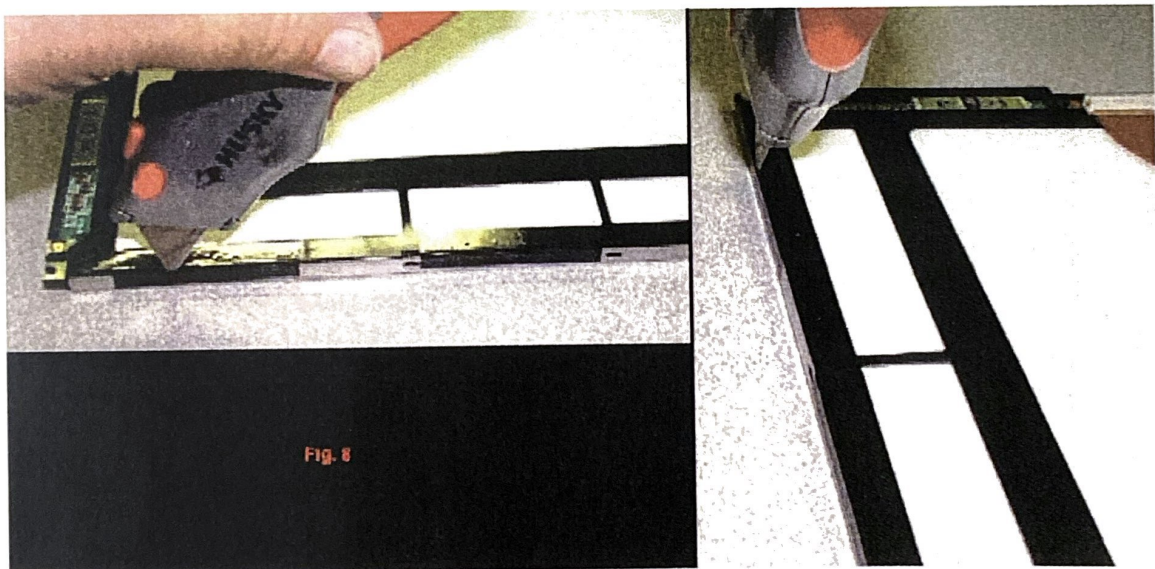
- 5) Pull the two wires through the clip to free them. Then remove the four screws holding the LCD in place as shown in Figure 6.



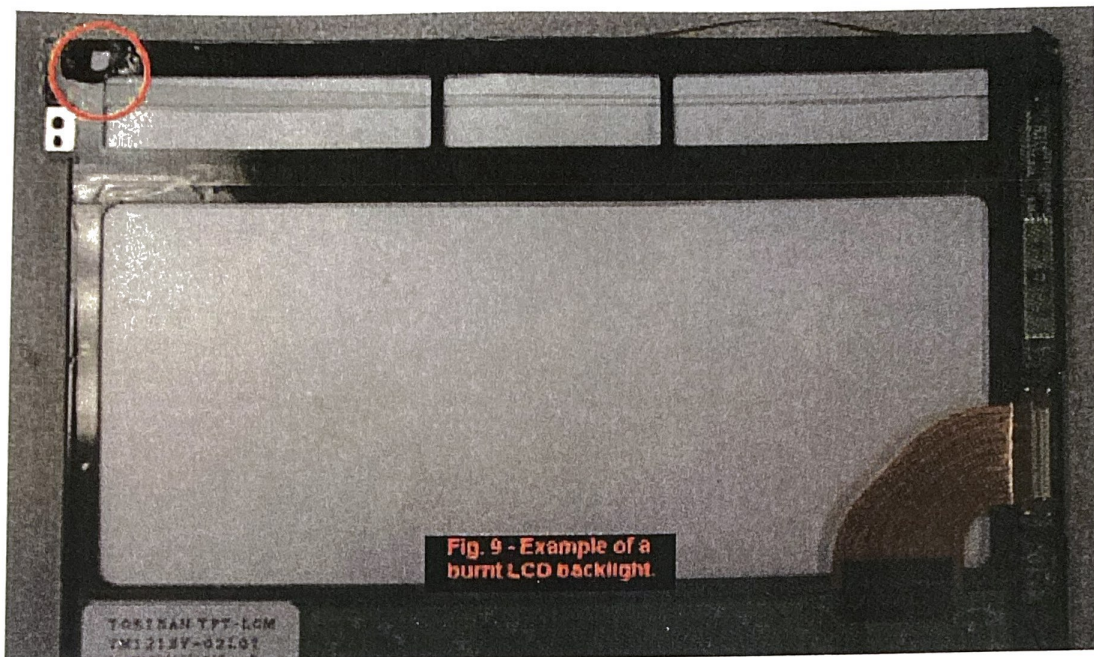
- 6) Tilt the screen to your left to disconnect the display cable to the LCD as shown in Figure 7.



7) Cut the tape at the top of the LCD with your razor as shown in Figure 8.



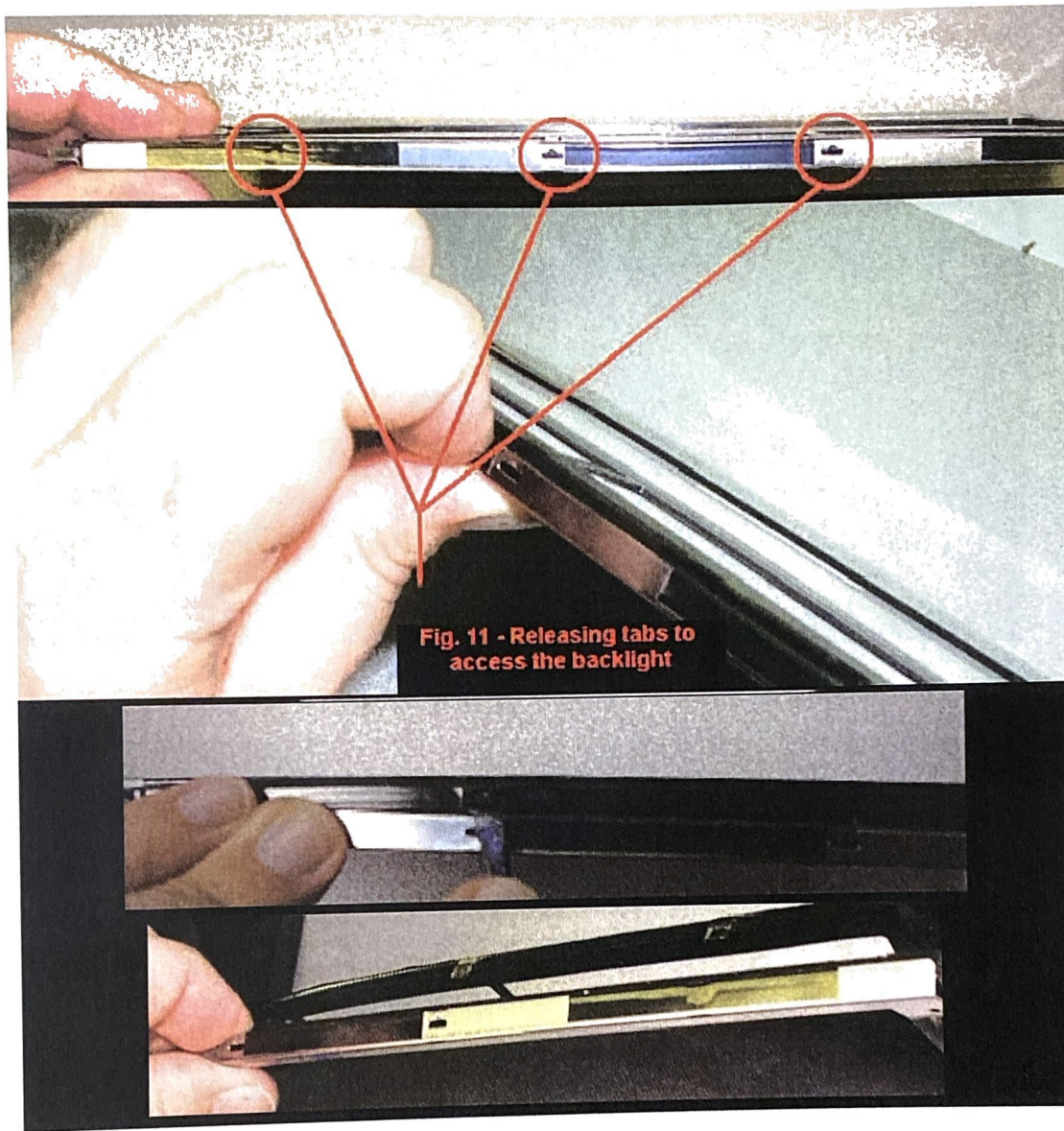
8) You may notice a burnt area from the backlight as shown in Figure 9, which is ok.



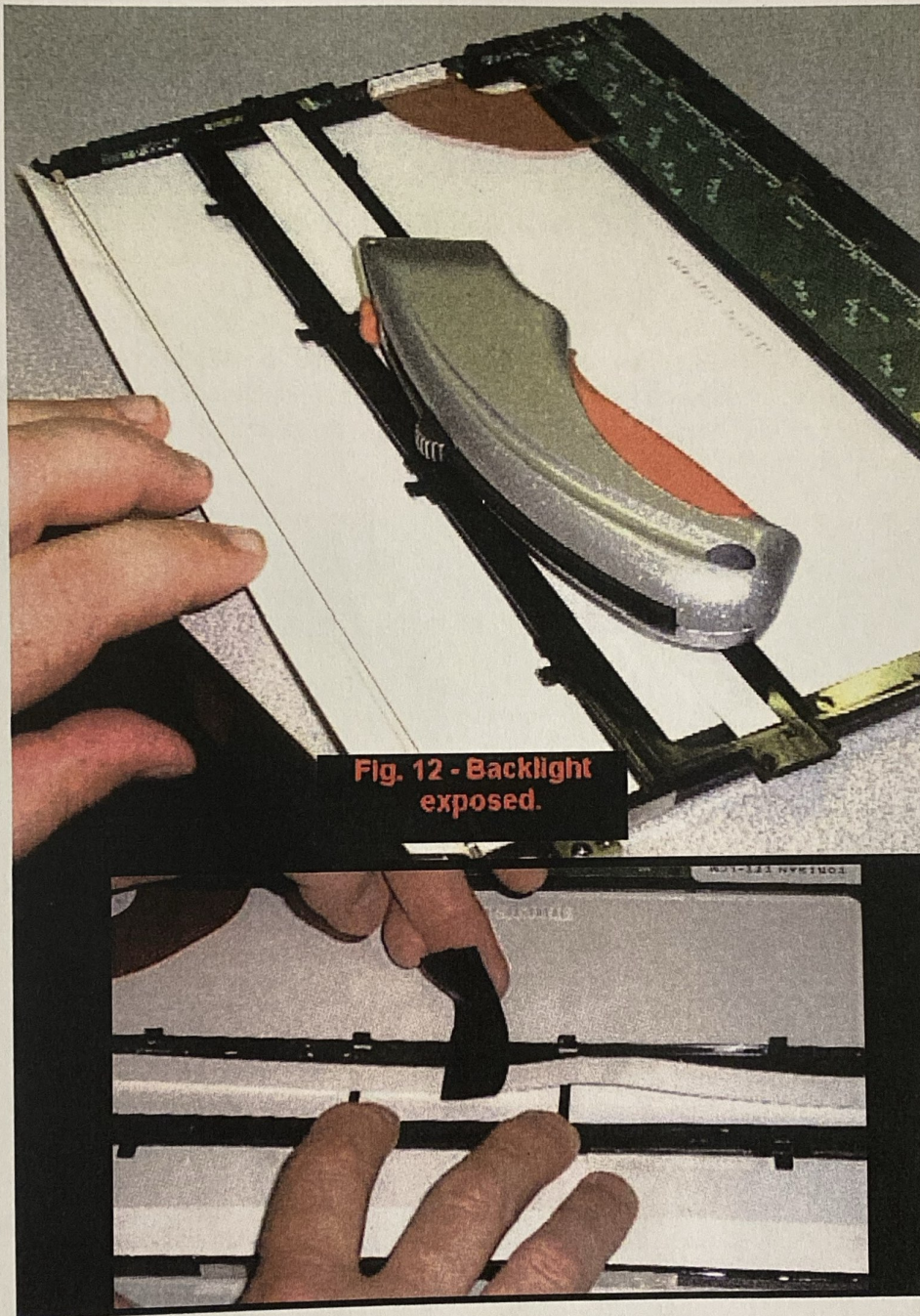
9) Remove the screws for the backlight cover shown in Figure 10.



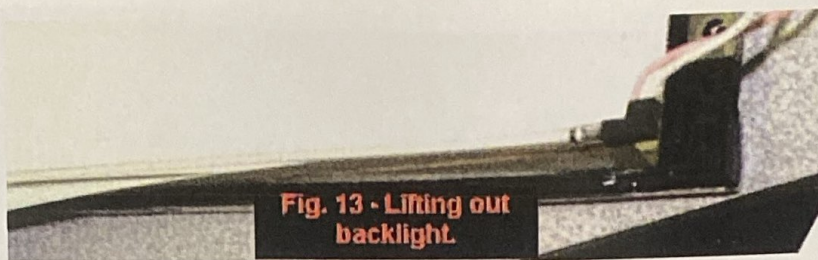
10) Release the tabs shown in Figure 11 using a small flathead screwdriver.



- 11) Fold the panel back and you can now access the backlight as in Figure 12. A piece of electrical tape can be used to hold the panel back while you work.

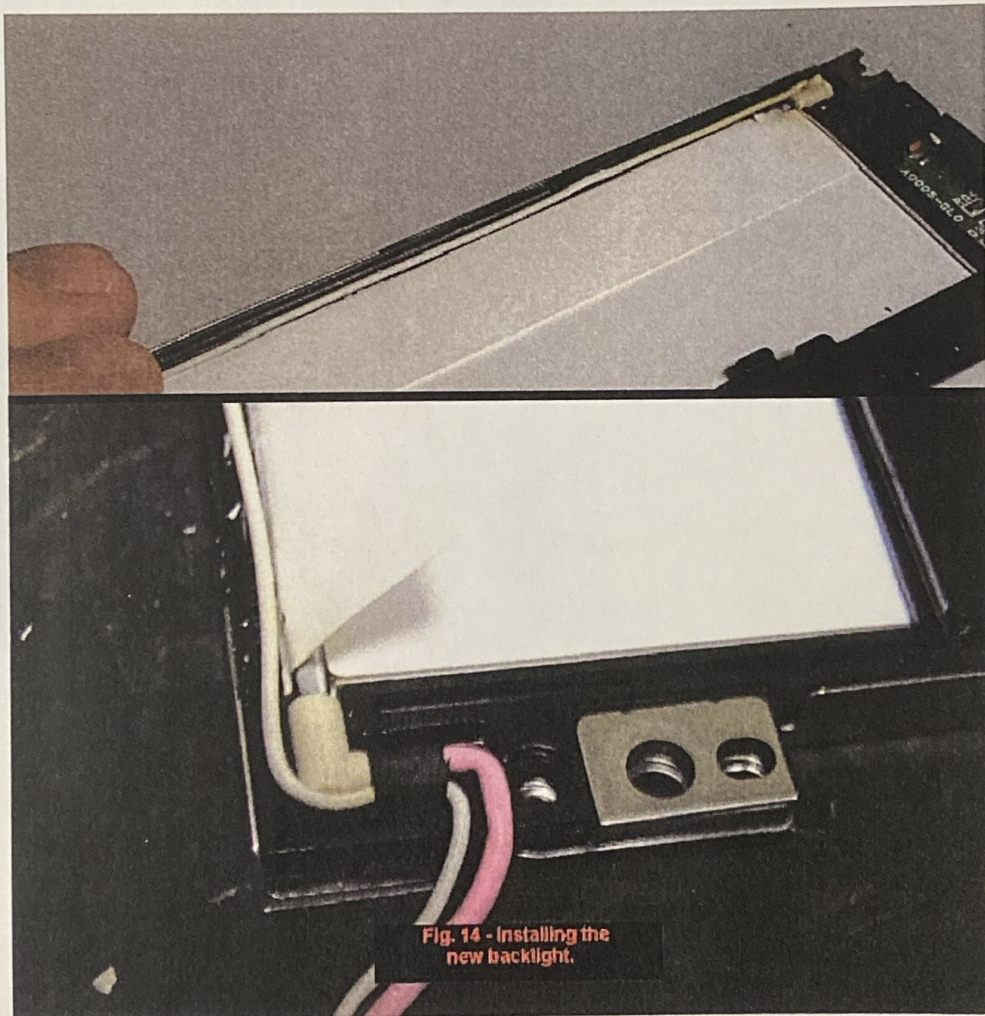


- 12) The backlight is seated on both sides with plastic/rubber ends. The Florescent tube runs underneath the paper, and attached to both ends is a connecting wire that runs along the other side of the paper. Lift the backlight out as in Figure 13. The tube may be cracked on one end, and you may see under the tube. Use caution when taking this out, as the tube is fragile.



**Fig. 13 - Lifting out
backlight.**

- 13) Clear any debris from the track before inserting the new bulb; use caution as there may be small bits of broken glass. Install the new backlight as shown in Figure 14. Fit both rubber ends into the areas molded into the plastic for them. The florescent tube will go on the inside of the paper and the wire runs outside along the top edge of the LCD. You will need to have everything fit firm together in place, but again use caution as the tube is fragile.



**Fig. 14 - Installing the
new backlight.**

- 14) To complete the installation, connect everything back together in reverse order.

POS Troubleshooting Quiz

1.
If the FOH terminals say, "**AlohaBOHSvr is down**". What does this mean?
2.
What's the one thing that always gets missed when trying to resolve a standalone situation?
3.
If the EDC (Credit Card) service keeps going online and then offline, what is the cause?
4.
If the EDC (Credit Card) service is going online and then offline, what should you do?
5.
What single register must be running for Bill Changer, Game Collection, and Ice Cream submission to work?
6.
If the registers are turned off at night, does the End-Of-Day cycle run?
7.
Does the BackOffice computer need to be running for the End-Of-Day cycle to run?
8.
If the FOH screensaver starts and stops bouncing on the screen, what is this an indication of?
9.
Network Switch or MicroHub? (What is preferred)
10.
How do you test a faulty MSR (Magnetic Swipe Reader)?
11.
If you need to purchase a replacement Serial printer cable, what cable can you go to Radio Shack or Best Buy and purchase as a replacement?
12.
How often does the POS system need to be PM'd?
13.
If the Aloha Manager loads up but the main screen is blank, What does this mean?
14.
What does the temperature reading on the front of the backoffice PC tell you?

15.

If FOH Terminal #3 is connected to port #3 on the network switch, what would happen if it was connected to port #6 instead?

16.

What terminal(s) does the backoffice PC communicate with?

17.

If the time is drifting on your POS system (ie, 5 or 20 minutes off), what is the cause?

18.

How do you fix the problem listed in #17?

19.

If the EDC Service is online and connected, could the credit cards service still be unavailable?

Explain the reason for your answer:

20.

Can a receipt printer be moved to the kitchen to be used as a kitchen printer in a crisis?

Explain the reason for your answer:

21.

What is the magic number of seconds that the FOH registers wait to determine network situations?

22.

What is the majority type of calls that are handled by POS Support about?

23.

What causes the **ExTerm** error message on the FOH Terminals?

24.

How do you test a faulty customer display?

ANSWER SHEET POS Troubleshooting Quiz

1.

If the FOH terminals say, "**AlohaBOHSvr is down**". What does this mean?

The kitchen printer controller is not running (The KP icon in the taskbar on the BOH computer).

2.

What's the one thing that always gets missed when trying to resolve a standalone situation?

The network switch –Turn it off, wait a few seconds, turn it back on. Should be first step.

3.

If the EDC (Credit Card) service keeps going online and then offline, what is the cause?

Service issues with the connection between the location and the CEC Corporate office.

4.

If the EDC (Credit Card) service is going online and then offline, what should you do?

Manually stop EDC Processing for a couple of hours and turn it back on later. Also, contact POS and inform them of service disruptions.

5.

What single register must be running for Bill Changer, Game Collection, and Ice Cream submission to work?

Terminal #1 **only**.

6.

If the registers are turned off at night, does the End-Of-Day cycle run?

No. End of Day is run by the terminal designated as MASTER.

7.

Does the BackOffice computer need to be running for the End-Of-Day cycle to run?

No. If the system is in Standalone, the MASTER terminal will perform EOD. Once standalone issue is fixed, data will be merged and BOH processing will commence.

8.

If the FOH screensaver starts and stops bouncing on the screen, what is this an indication of?

Bad network connections. Network communications is being lost. Check connections.

9.
Network Switch or MicroHub?

Network Switch! Network Switch is better than a hub and will provide less network traffic, less packet collisions, and overall better network communications between devices.

10.
How do you test a faulty MSR (Magnetic Swipe Reader)?

Remove it from the POS terminal and connect it to another.

11.
If you need to purchase a replacement Serial printer cable, what cable can you go to Radio Shack or Best Buy and purchase as a replacement?

Null modem cable.

12.
How often does the POS system need to be PM'd?

Once every month.

13.
If the Aloha Manager loads up but the main screen is blank, What does this mean?

Nothing major. The main page is unable to retrieve some data from one of the last 5 days. Has no effect on current POS operation.

14.
What does the temperature reading on the front of the backoffice PC tell you?

Only tells the temperature of the hard drive bay itself, not the inside PC temperature.

15.
If FOH Terminal #3 is connected to port #3 on the network switch, what would happen if it was connected to port #6 instead?

Nothing. It will still work.

16.
What terminal(s) does the backoffice PC communicate with?

Only the terminal designated as MASTER.

17.
If the time is drifting on your POS system (ie, 5 or 20 minutes off), what is the cause?

The terminal designated as MASTER. The MASTER terminal sets the time throughout the system (Even backoffice computer).

18.

How do you fix the problem listed in #17?

Reinstall the register if time still drifts, replace the motherboard battery.

19.

If the EDC Service is online and connected, could the credit cards service still be unavailable?

YES.

Explain the reason for your answer:

The connection between the location and CEC Corporate office is good. The EDC program senses the connection at the CEC corporate office firewall which is as close to the credit card processor we can check.

The problem is with the credit card service between the CEC Corporate office and the credit card processing company.

20.

Can a receipt printer be moved to the kitchen to be used as a kitchen printer in a crisis?

YES.

Explain the reason for your answer:

POS Support will need to be contacted so they can reconfigure Aloha to utilize a different type of printer, otherwise it will print gibberish if anything.

21.

What is the magic number of seconds that the FOH registers wait to determine network situations?

60. -The MASTER terminal will wait 60 seconds to discover the backoffice computer if connection is lost. The POS terminals will wait 60 seconds to discover a MASTER terminal before they ask to become a MASTER terminal.

22.

What is the majority type of calls that are handled by POS Support about?

Standalone issues. -Makes up 80% of all calls to POS (Weekdays and weekends).

23.

What causes the **ExTerm** error message on the FOH Terminals?

The Aloha gold code CEC uses is based on a normal design of a 4 terminal system. When a configuration is reduced to 3 terminals, this error appears and is to be ignored on locations with 3 POS terminals.

24.

How do you test a faulty customer display?

Remove it from the POS terminal and connect it to another.